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THURSDAY, SEPTEMBER 28, 1978

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, D.C.

The committee met at 10 a.m., in room 235, Russell Senate Office Building, Hon. Howard W. Cannon (chairman of the committee) presiding.

OPENING STATEMENT BY THE CHAIRMAN

The CHAIRMAN. The hearings will come to order.

On Tuesday afternoon, President Carter unveiled a 12-point national export program to improve the U.S. international trade performance. His announcement was timely because yesterday the Department of Commerce released figures which show that the August deficit was $1.62 billion, down from $2.99 billion in July.

The President is to be commended for his effort and his personal commitment to export expansion. Never before has a President identified himself so publicly with the objective of expanding exports. In his speech Monday before the International Monetary Fund-World Bank joint meeting, he pledged that he would take action in three areas: (1) exports; (2) inflation; and (3) energy. In doing so, he has accorded export expansion a priority which it has never before had.

As the President said on Tuesday, it is an "opening of the door," and he is committed to a long-term effort to reduce the trade deficit, including, when necessary, additional projects to supplment this program. The battle to improve the export competitiveness of the United States will not be won in 1 year or 2. Nor can it be won without the cooperation of every segment of the American public, which will be the ultimate winners of a strong dollar, a strong international monetary system, and a competitive domestic economy.

The discouraging record of our international trade performance is well-known to those of us who have followed this subject. For the last 4 years, our exports, adjusted for inflation, have remained about the same, rising from $56.2 billion in 1974 to $57.2 billion in 1977 in constant dollars. In contrast, most of our industrial competitors have enjoyed an export growth rate in excess of ours. In the case of Japan and Germany, they have even expanded their market shares in many third countries where we compete head on.

In retrospect, the persistence of the trade deficit has made it clear that the 1971 merchandise trade and the current account deficits were not aberations but indicators of fundamental problems in our economy.

The trade and current account deficits have also been aggravated by

the divergence in the growth rates of our trading partners and our costly oil imports. The robust growth of the German and Japanese economies should narrow our deficits with those countries. The implementation of phase II of the President's anti-inflation program should also make our goods more price competitive.

If the President's energy program works as planned, the burden on our economy imposed by the oil price increases should diminish, and a significant contribution to our balance of trade could be seen within the next year.

All of these factors—an enhanced export promotion program, a tough anti-inflation program, the convergence of growth rates, and an energy program—should help to reduce the merchandise trade and current account deficits.

The President also noted on Tuesday that he was deeply concerned about the fact that our rate of productivity growth was the lowest of any major industrial nation. Together with his May directive establishing an industrial innovation policy review, it is clear that he comprehends the possibility that structural changes may underlie the trade deficit and that the deficit is a leading indicator that the U.S. economy's comparative advantage in manufacturing is declining. If this is true, the areas of structural weakness must be identified and appropriate policies to cope with them must be devised.

This committee is committed to pursuing an intensive inquiry into the importance of research and development to our international trade position. On May 16, 1978, the Subcommittee on Science, Technology, and Space held a joint hearing with the Subcommittee on International Finance of the Senate Banking Committee on U.S. high technology exports. We intend to continue our activities in this crucial area.

This morning the committee will explore the details of the President's national export program. Close cooperation between the executive and the Congress in drafting the legislation and designing the programs will be required to implement the proposals. Information obtained from this hearing will facilitate the creation of an effective working relationship.

Our first witness will be the Hon. Juanita Kreps, Secretary of Commerce; accompanied by Frank Weil, Assistant Secretary of Commerce for Industry and Trade; and Stanley Marcuss, Deputy Assistant Secretary. We deeply appreciate the Secretary's taking time out of her busy schedule to appear here this morning. In view of her imminent trip to Japan, to which she will lead a 100-member U.S. trade delegation, she will present her statement and then leave for a predeparture briefing.

Madam Secretary, you may proceed. We are delighted to have you here today.

STATEMENT OF HON. JUANITA M. KREPS, SECRETARY, DEPARTMENT OF COMMERCE; ACCOMPANIED BY HON. FRANK A. WEIL, ASSISTANT SECRETARY FOR INDUSTRY AND TRADE, AND STANLEY MARCUSS, DEPUTY ASSISTANT SECRETARY

Secretary KREPS. Thank you, Mr. Chairman. I'm pleased to have this opportunity to outline for the committee the nature of our export problem, much of which you have covered in your statement, and the steps

announced Tuesday by the President that we will be taking in order to correct the problem. I shall limit my remarks to the objectives of these new initiatives which you see displayed on the two boards in front of you since your committee will be hearing from other administration witnesses who can offer the details on the characteristics of the trade deficit, the degree of competitiveness of U.S. industry in international markets, and the steps through which we shall seek to encourage U.S. exports.

The United States has a tradition of indifference to exports. It is true, of course, that there have been a number of very active and successful exporting firms in the United States. But they have represented a very small fraction of all U.S. firms. Even today most of our exporting is done by about 100 American firms. It is also true that the Federal Government has tried to assist American exporters with a variety of limited programs. But by and large the Government has assumed only minor responsibilities for encouraging exports.

The recent large trade deficits have weakened the value of the dollar, added to domestic inflation, and created instability in the world economy. They make it obvious that we must change our national attitude toward exporting. Regardless of what the United States does about exports, solving our trade and dollar problems will call for action on several fronts. We must bring our demand for energy under control. We must reduce our domestic inflation rate. We must synchronize our economic policies with those of our main trading partners to insure widespread economic growth.

These steps are absolutely essential to cut back our oil imports, to keep our goods price competitive in international markets, and to guarantee that the foreign appetite for our exports is as great as our appetite for their exports. The administration is working hard on all these fronts.

Still, to achieve anything like a long-term solution to our trade and dollar problem, we must expand U.S. exports.

Our recent export record has not been promising. Adjusted for inflation, real U.S. exports showed virtually no growth in the 1974–77 period. Our competitors, by contrast, managed a real export growth rate of nearly 4 percent a year, despite slow worldwide economic growth. The problem is particularly severe for manufacturers, which constitute two-thirds of our exports. In 1976, we had a $12 billion surplus in manufactures trade. That fell to a $3 billion surplus in 1977. So far in 1978, manufactures trade is in deficit.

Our new initiatives represent a beginning. Taken altogether, they add up to a new attitude toward exports.

In announcing the program, the President gave one strong clear message to the Nation: The United States must make exporting a matter of high national priority. In his statement, the President emphasized his administration's determination to give exporting the high-level and sustained attention that it needs.

The measures fall into two main categories: some provide increased direct assistance to U.S. exporters, and others reduce our domestic disincentives to exporting.

On the incentives side are a variety of measures designed to help offset the special difficulties associated with exporting.

The President will ask Congress to expand the loan authorization of the Export-Import Bank by $500 million in fiscal year 1980. This

follows a five-fold expansion in the last 2 years. This will increase the flexibility of Eximbank lending procedures. John Moore can provide you with more details of these procedures as you go ahead with the testimony.

The President will direct the Small Business Administration to target up to $100 million of its loan guarantees to small firms entering or expanding export business.

The President will increase the funding for the export development programs of the Departments of Commerce and State by $20 million, reversing a 7-year decline in the funds devoted to these programs. Within Commerce, these added funds will be directed mainly at upgrading our information and counseling programs designed to assist U.S. companies, especially small- and medium-sized ones, in marketing abroad.

The President will continue to work with Congress to resolve the issue of taxation of Americans working abroad and to make less costly but more effective our export tax incentives.

And, finally, the President will continue to support agricultural exports through aggressive financial and promotion programs. This year's increase in the level of short-term credits is only one example of the administration's intent to foster agricultural exports.

There are also a variety of steps that will reduce our domestic barriers to exports. These disincentives have accumulated as the result of Government administrative and regulatory actions intended to serve legitimate domestic concerns, but with consequences inadvertently harmful to U.S. exporters. Our objective is to inject better balance into Government decisions and, if possible, to pare down the bureaucratic obstacles that represent totally unnecessary impediments to exporting.

The President will direct the heads of all executive departments and agencies to take into account the possible adverse effects on U.S. trade of their major administrative and regulatory actions, requiring reports on their progress in identifying and reducing negative export effects.

The President will direct all departments with export control responsibilities to take export consequences fully into account when considering the use of export controls for foreign policy purposes. Departments will give weight to whether similar goods are available from countries other than the United States.

The President will soon issue an Executive order clarifying the application of environmental reviews to exporting. The order will establish environmental review requirements for only a minor fraction of U.S. exports and will balance our concern for the global environment with our interest in promoting exports.

The President will direct the Department of Justice to clarify its enforcement priorities under the Foreign Corrupt Practices Act, a source of much uncertainty to the exporting community.

And, finally, the President will direct the Department of Justice to make clear the scope of our antitrust laws in the area of foreign joint ventures, and to expedite requests for guidance under its business review program.

All these measures must be viewed within the context of a number of administration initiatives directed at reducing the foreign barriers to U.S. exports, and at maintaining a fair international trading system. The administration has aggressively attacked these barriers

through the multilateral trade negotiations at Geneva, and it will continue to do so.

To assure fair competition in trade, the administration is pressing hard for the creation on an international code to restrict the use of Government subsidies for exports. It is also working to tighten the rules on Government-backed export credits.

The President has asked me, in coordination with the heads of other agencies, to direct the continuation of our efforts in this field. In addition, he will shortly issue an Executive order reconstituting the President's Export Council which should insure that a broad flow of ideas related to exporting will enter into the Government policymaking process.

As an immediate extension of our overall efforts to sell abroad, this Saturday I shall be leaving for Japan, heading up a delegation of more than 100 business executives and senior Government officials. This will be the largest trade delegation in our history, and we shall be sponsoring others in the future.

To close, I want to reemphasize that these new initiatives represent only a beginning. We shall look forward to working with you, Mr. Chairman, as we develop additional steps that will help us to overcome the traditional neglect of exports.

Thank you.

The CHAIRMAN. Thank you very much, Madam Secretary. That is a very fine statement. I want to commend you and the President for starting to move in this direction. I think it has long been neglected, and we have an opportunity now to work together to make some substantial progress for the benefit of our country. We appreciate your taking the time to be here with us this morning.

Secretary KREPS. Thank you, Mr. Chairman. I leave you to the experts.

The CHAIRMAN. All right, Mr. Weil.

Mr. WEIL. Mr. Chairman, I have no prepared remarks. Secretary Kreps, I think, has stated very adequately the administrations views. I think the testimony of my colleagues from the Council of Economic Advisers and the Department of the Treasury and the Eximbank will support it. But with you indulgence I might make a couple of additional comments, and then I would be very happy to respond to your questions.

I think that it is sometimes overlooked that the problem that we are dealing with now has been at least 25 years in the making. And I think there are some people who expect us to solve the problem in a very short time. I feel it is important that we reemphasize and remind ourselves that a problem this long in the making is not going to be that short in the solving.

The fact that we only export a little over 6 percent of our gross national product—which is up from the figure of just a few years ago—is illustrative of our problem. Consider some of our major competitors. Japan exports about 14 percent of its gross national product and Germany about 23 percent. They export that much because they have to. Since they are major importers they have made it a point to learn how to export. And they have been learning how to do it for a long time.

If we were to force ourselves, because of the new experience of substantial imports of foreign oil, to learn how to export, and if we were able to effect the margin even slightly, we could achieve a substantial reduction in our trade deficit. Let me just give an indication of the orders of magnitude involved. This is not a prediction. If we could achieve a 1-percent increase in the percentage of our exports to gross national product, our exports would increase by $20 billion. This would be roughly two-thirds of last year's trade deficit.

Obviously we can't do that overnight. But it gives some idea of the scale of the effort that we have to undertake. To give another perspective; if the United States had maintained its 1974 market share in 1977—the market share of the free world industrial markets—we would have had in 1977 an additional $14 billion of exports. That is a hypothetical number, but it gives a sense of some minimum level of expectation over a period of years.

The last observation I would make, Mr. Chairman, is that this is the fifth effort to mount an export drive in 15 years. Just a few weeks ago I fell heir to a draft of a document that was prepared in 1971, and it became evident that we could have spared ourselves a lot of work this past summer if we had found it sooner. The problem has not changed very much. The first four of these efforts, however, foundered for a variety of reasons. One of them, I think, was that in each instance we had a balance of payments problem. This stimulated concern and a desire to deal with the trade problem. In each instance, however, we had a balance of trade surplus, albeit dwindling as those years went by. And in each instance, within 1 year or so after the efforts had been started, the world financial condition changed and the balance of payment situation was alleviated. To mix a metaphor, the wind went out of the sail that was driving that export effort.

This time it may be different because we have a genuine trade deficit which I'm afraid is going to be with us for some time. And as a consequence, the wind may stay in the sails of this effort long enough—to really mix a metaphor—to sink some roots.

I would be glad to answer your questions, sir.

The CHAIRMAN. Well, in light of the fact that you point out that four previous efforts have failed, perhaps it is just as well that you didn't find that fourth one until after you developed your blueprint for this activity.

Mr. WEIL. I think you're probably right.

The CHAIRMAN. The President described this 12-point program as the opening of the door. Now, if the program doesn't significantly reduce the trade deficit, how long would we have to wait until we got a phase II or some further upgrading of the effort?

Mr. WEIL. Well, I don't think there is a very categoric answer to that question. I think, to begin with, we are already seeing the evidence of some change in the trade figures which will inevitably result because of the change in the value of the dollar over the past year.

And I think it will be impossible to sort out what part of a positive change in our trade balance over the next year or two could be attributed to price changes as distinguished from this export program.

We used to have a saying in my business that you don't get the order at any price if you don't ask for it. And a large part of the American economy is not asking for the order. I think the objective here is to

sustain this effort so as to orient the American business community more outside of the United States than it was before.

But in specific response to your question, I would think that this new broader-based President's Export Council that the Secretary referred to will be monitoring the situation very carefully. We will be reporting at least annually to the President on the state of progress or lack of it. I would assume and hope that if there are deficiencies in this program, that they be identified and that we will add to the program as we move along.

The CHAIRMAN. It would seem to me, if the objectives of the President's 12-point program can be achieved here, we should have some very marked improvements, because so many of those seem to impact on the current export problems. Would you agree with that assessment?

Mr. WEIL. Well, it is hard to say. I think that this program is more significant in its whole than in its parts. I've been asked a number of times what's the most important element in the program. And I like to say that I compare it a bit to a four-legged table. I've never seen a four-legged table stand on less than four legs.

On the other hand, I think it probably can be said that the first item, the statement of priority, really symbolizes the importance of all the others. Without a clear recognition of the need to make exporting a national priority, we won't get very far.

But the other aspect of it is to say that this could have a significant effect in the short term. I think that would be an exaggeration. Some aspects of it might. It is said in some parts of the world today that the United States has become an unreliable supplier because of clouds hanging over the ability of U.S. firms to make a transaction. If those parts of the program that relate to better balance in our decisionmaking process, particularly with respect to the availability questions are implemented effectively, then there could be a fairly substantial short-term impact. We hear cases of firms that have lost out on billions of dollars of business because of these unreliable supplier questions. In that respect there could be some short-term substantial benefit.

The CHAIRMAN. Well I am just noting three of them here. Item nine, clarification of international application of U.S. environmental regulations. Confusion about environmental regulation obviously has had a chilling effect on some exporters because they are exporting to countries which, for the most part, have no environmental requirements. And if we impose very strict environmental export requirements, it puts them at an unfair advantage against other countries.

Mr. WEIL. Yes, sir. That is what I had in mind when I referred to the unreliable supplier question.

The CHAIRMAN. And on item 10, the guidelines clarifying the Foreign Corrupt Practices Act. Well, the Corrupt Practices Act has had a chilling effect because many of the countries that we export to have a different view as to what "corrupt practices" are, or they view "corrupt practices" differently.

Mr. WEIL. Well, that's right. On the other hand, that law, as you know, passed both Houses of the Congress by wide margins, and it represents the views of the American people.

The CHAIRMAN. I understand, but at least we ought to be able to spell out the guidelines and really clarify the act to say what it means. Some potential exporters have told me that they're not willing to take the risk involved because they don't know really what the rules of the game are.

Mr. WEIL. That's right. And what we're hopeful is that the Justice Department will analyze hypothetical cases and come up with some indication of the kinds of cases. The kind of cases in particular that I hear about all the time is that a business is considering expanding into another market. And the way to begin in many cases is to get an agent. Maybe that might add 1 or 2 percent to the volume of that company's business. If one has to get an agent to do that and if the actions of that agent might cause that business and its leaders to be subject to indictment and conviction, they might say, it isn't worth it.

Well, if we can get more precise do's and don'ts as to what the Justice Department would probably prosecute under that law, maybe we could remove some of the uncertainty.

The CHAIRMAN. Regarding 11, it is very important to expedite the Justice Department antitrust review procedures so that businessmen can get a review and a decision as to what they can and can't properly do within a reasonable time.

Mr. WEIL. Yes, sir.

The CHAIRMAN. It has been alleged that proposals have been projected primarily for budgetary reasons rather than other purposes. Would the administration support programs which would require the expenditure of additional funds but also meet the criteria of cost effectiveness?

Mr. WEIL. Well, I was going to say that you will hear from my colleague, Bill Nordhaus on that. But I think that I have confronted that question on a number of occasions in a number of different ways.

We have tried in this program to come up with something which is not going to add substantially to, or materially even, to the problems of the Federal budget and its deficit. I find frequently businessmen will urge us to spend a lot more money in one forum or another in support of a particular program. And then I remind them that in another forum with another hat on they're telling us to cut the Federal deficit.

The problem, I think, today is that every special interest wants us to spend money on their interests and less on somebody else's. The business community, I think, is no exception to that rule. We have tried very hard here to come up with a program which meets the needs of the pluralistic business community in this country, and is something that is intended to meet the problems of incentives and disincentives for large and small businesses.

I'm sure there are some who feel that we have neglected some of their special concerns.

The CHAIRMAN. In addition to the $20 million promotion fund for the Commerce and State Departments, will there be any additional funds required? For example, will there be additional funds required from Congress for the additional agricultural trade offices and the staffing of the President's Export Council and so on? And if so, what is your estimate here?

Mr. WEIL. Well, as far as staffing of the President's Export Council, I think I can say almost for sure that that will not require any additional funds. We can handle that comfortably within our appropriated funds in the Department of Commerce.

The CHAIRMAN. What about the additional agricultural offices?

Mr. WEIL. My understanding is that the agricultural program does encompass some potential additional appropriations. Whether that is for the additional offices—I would like to defer to the Department of Agriculture.

Mr. MINYARD. Jim Minyard of the Foreign Agricultural Service. We have estimated that we would set up about 16 trade offices around the world. And the budgetary impact at the end of 5 years would be about $3 million a year.

The CHAIRMAN. About $15 million for the 5-year period?

Mr. MINYARD. Well, it would be something like $10 million for the 5-year period, because we're going to be setting them up, about four or five a year.

The CHAIRMAN. I see.

Mr. MINYARD. So it would be about $10 million.

The CHAIRMAN. Of the additional $20 million, how much of that will go to Commerce and how much to State? And how much of it will be totally new funding as against reprograming within the Commerce Department, for example?

Mr. WEIL. Well, we contemplate that about half will be reprogramed from various parts of the overall budgets of State and Commerce. The additional budgetary impact currently anticipated—and we've just begun our negotiations with OMB—will be about $10 million.

The CHAIRMAN. Is that for both Commerce and State?

Mr. WEIL. That is both Commerce and State. I cannot speak with precision about how State is handling its reprograming. The split between the two departments at the moment is roughly $2 million to the State Department and $18 million to the Department of Commerce.

The CHAIRMAN. I have been advised that the Department of Defense has a policy which prohibits the local mission from assisting directly U.S. businessmen making a sale of arms and munitions. Inasmuch as few, if any, major industrialized nations impose a similar restriction on their nations, and since most of these same products are available elsewhere, how will the President's directive affect this policy, if at all?

Mr. WEIL. Mr. Chairman, I'm not qualified to answer that question. We have not discussed it, and I would like to, if I could, supply a written answer on that.

The CHAIRMAN. I would like an answer supplied for the record, because this matter was called very forcefully to my attention recently. And, frankly, it just does not make sense.

If we have potential exporters who are in the military hardware business and they have a license for export, it doesn't make sense to me that our foreign officers out of the State Department can't help these people by funishing whatever assistance is needed—not to try to favor one supplier from the United States over another, but to provide them whatever assistance is available from our embassies in trying to sell their products.

Mr. WEIL. Well, your statement is hard to disagree with, but I just don't know what the policies of the Department of Defense are in this regard. But we can look into it and we will report back to you.

The CHAIRMAN. Precisely what weight will be given to the export consequences and agency decisions pursuant to the President's directive?

Mr WEIL. You question was precisely what weight I cannot answer that question precisely, sir. I don't mean to back away from the question, but let me explain what is intended.

We believe, based upon our examination of this issue, that many agencies of this Government and many independent regulatory agencies have not in some instances considered export consequences in their regulatory decisionmaking process. They obviously have many policy considerations as they draw their decisions.

The intent of this directive is not to remove from the table of decisionmaking the policy considerations that they now have. Rather it is to add to the table the export consequences issue. Obviously, this will make more complicated and more difficult the lives of the decisionmakers. But the notion is that in time it will bring balance to their decisionmaking so that we'll not overlook in that regulatory process the effect upon jobs, the trade balance and the dollar, of our regulatory decisionmaking.

This, I think, would have to be regarded as something that would benefit and would take effect slowly and over a period of time, and only if we are properly prodded within the executive branch and by the Congress.

There is a great tendency for all of these agencies to look at their problems through the blinders that they now have.

The CHAIRMAN. How do our current promotion programs compare to those of our major industrialized competitors in terms of expenditures and personnel?

Mr. WEIL. Well, on a per-dollar of exports or as a share of our gross national product or on any scale that we have, I don't have those exact numbers with me today. We, with the exception of Germany, oddly enough, undersupport all of those programs.

The CHAIRMAN. Undersupport them?

Mr. WEIL. In comparison to our major industrial competitors. Germany has a different system. It is a kind of a mixed government and private enterprise with their chambers of commerce which are supported rather more directly by the business community itself. So it's very hard to find comparisons. But there is no doubt that because of the lower importance we attach to exporting we give it less support. In recent years the support of the U.S. Government has been declining on a relative basis. The dollars actually have gone up, but because of the notion that we could rely upon price considerations alone to balance our trade problems those increases have been inadequate to meet current needs and in constant dollars have actually declined.

I might add, Mr. Chairman, this effort to increase the budget resources of the Departments of Commerce and State is the first step toward increasing support in 7 years, and is not immaterial. It is not a large amount of money, according to U.S. budget standards, although $20 million is a large amount of money. But it is best to judge it as really $20 million on top of roughly $60 million of current expenditures. In that context, it is a pretty substantial increase.

And I think that it probably is adequate to getting us started down this road.

The CHAIRMAN. Two of the three export development programs prescribed by the President, the risk sharing and targeted assistance programs, are actually old concepts that have been used at one time or another by the Department and then dropped. Why do you believe that they will now be successful?

Mr. WEIL. Well, they were dropped in various ways. I suppose, in part, because of limited budget resources. As to whether or not we have evidence that they will be successful this time where they may have failed in the past, we don't.

And I have to remind you, sir, that among the great merchants in this world there was one who once said that he knew half his advertising dollars were wasted, but he did not know which half. And he knew that he had to spend to make sure that he made his sales.

I think that we have to be willing to take some risks as we undertake promotional efforts at the intergovernmental level; even though we have a responsibility to the taxpayers to account carefully for all that we spend. The risktaking programs that were referred to relate to the fact that there are smaller businesses which simply don't have the resources or the inclination to start exporting. And it is very expensive today to travel. A glass of orange juice is $8 in Tokyo. One of the anomalies is that we are price competitive, but for the businessman to even get there to take advantage of that competitiveness, he has to invest a lot of money, even in that glass of orange juice.

So one of the things we'll be doing is providing some upfront money which will be returned to the U.S. Government if the business has a successful export effort.

The CHAIRMAN. Senator Zorinsky?

Senator ZORINSKY. Thank you, Mr. Chairman. Possibly this could better be answered by the individual from the USDA, but my concern would be the following.

One of the objectives announced by the President earlier this week as a part of the administration's new export policy is continued financial and promotional support for agricultural exports. On Monday the House approved an agricultural trade expansion bill similar to the one passed last month by the Senate. It is designed to place greater emphasis on the importance of agricultural exports to this country, and to create an intermediate term credit program.

How does the congressional initiative fit in with the President's new policy of continuation, expansion, and promotion of agricultural products?

Mr. WEIL. Senator, if I might defer to the representative of the USDA.

Mr. MINYARD. Well, we think in reviewing the President's package, that he has tied in specific references to trade offices and intermediate credit for select agricultural products, so I think he has recognized that the trade legislation that has been passed by both the Senate and the House in proposing this new program——

Senator ZORINSKY. Will your offices, which you previously mentioned would be set up at the rate of approximately five per year be able to have the capability to connect the willing buyers and sellers? What I'm trying to get at is, historically, I think, in agriculture we have lacked the ability to obtain a direct outlet for our product as other businesses can do. They hire people. They go abroad and find buyers somewhere.

Agriculture seems to be buffeted not only by the USDA itself, but also by the State Department, which many times has been known for using agriculture as a leverage by which to obtain and negotiate foreign policy for this Nation.

I was wondering, whether these offices that you are talking about creating throughout the world would be able to initiate agricultural business with these other nations?

Mr. MINYARD. Well, one of the main functions of the trade offices will be to first identify market opportunities and then to set in motion some kind of a trade activity that would get the U.S. sellers of these products together with the foreign buyers of these products.

You can have a sales team; you can bring a foreign buyers team to the United States. But this will be one of the main functions of the trade offices.

Senator ZORINSKY. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. The service industries, particularly construction and design, are an increasingly important component of our exports. Several firms have expressed an interest in joint activities on a long-term basis.

The President's statement supported one-time joint ventures, but was less clear on long-term ventures. Would you comment on that?

Mr. WEIL. Well, there's a 1918 act that provides for such associations, but it was couched in the language of goods. There has been some question as to whether that covers services as well. The Justice Department advises us there's never been a prosecution with respect to services. And they monitor this carefully under that act.

I think they can clarify that issue in some manner which would make it clearer to businesses what they can and cannot do under the act.

The CHAIRMAN. It's my understanding that you have gone on record as supporting its expansion and application to service sector.

Mr. WEIL. I testified before the Commission on the Review of the Antitrust Laws just a few weeks ago to that effect; yes, sir.

The CHAIRMAN. Was this extension considered by the task force, and why was there nothing in the President's statement about it?

Mr. WEIL. Yes, sir, it was considered by the task force. And it was not deemed to be sufficiently a serious problem to be dealt with legislatively. But it could be dealt with by Executive action. And that is why it was not singled out as an item for this particular program.

The CHAIRMAN. At the present time, what are the thoughts of the Justice and Commerce Departments about the kinds of permissible ventures and activities under the antitrust laws?

Mr. WEIL. I think there may be some slight difference of views between the two Departments. The Justice Department doesn't believe that there is ground for the business community to be concerned about the possibility of charges being made under those laws. But businessmen, as we all know, thrive on the words: reliability, dependability, consistency, and predictability.

As Ambassador Strauss is wont to say, businessmen—if you told them the world would end on January 1, 1979, will plan for that event. And I think there's a lot to be said for that. And what the businessmen need here is a little clearer idea.

The Justice Department, understandably, feels that if they start clarifying in advance, they limit their prosecutory discretion. I think they also claim that you can't tell in advance what kinds of situations would be violations of the law.

On the other hand, as they go about their daily business of making prosecutive judgments, they are in fact doing just that. So we hope that they will map out in advance, by the use of references to hypothetical cases, those situations where they think that there would be violations of the law.

Toward that objective, I'm advised that there is a group of attorneys that are proposing to have a conference which will reflect hypothetical cases based upon real problems that they have with their clients. And that these cases might provide a basis for the Justice Department and the Department of Commerce and other agencies involved to get some more clarity.

The CHAIRMAN. The President expressed his intention to expand the Export Council. Can you provide us any information as to the anticipated size, composition, and additional cost, if any, and relationship to his personal staff?

Mr. WEIL. Well, there is an Executive order working its way through channels, and which may be modified before it is signed by the President. The order proposes a 30-member body which would be comprised of—if my memory serves me correctly—6 representatives from the Hill, 3 from each side; 9 from the business community, 3 large, 3 medium-sized and 3 small; 3 representatives of labor; 6 representatives of the executive branch agencies most concerned with exports; and 6 from the public-at-large, representing all various types of interests.

If anybody added that up, I think it comes to 30. And so that is the composition of the body. And the purpose of broadening the body is that when it would report to the President and to the Secretary of Commerce its credibility would be enhanced by the diversity of its membership. In the past, I think any statement from 20 businessmen would generally receive only a shrug of the shoulder because people too often accept a business statement as being self-serving. The reports from the broader-based Council on the other hand, would I think, be received with greater weight. Since it would represent a consensus of views from business, labor, Government, and the public-at-large. Additionally that body will, under the direction of its chairman, look into sectoral problems, some of the problems of industrial innovation and productivity, as well as specific implementation of this program. As things are now proceeding, we do not anticipate any additional expenses associated with the reconstituted Council.

The CHAIRMAN. Senator Ford requested that I ask some questions for him. How does the President's export policy recommendations affect the export of a product banned in the United States, like tris?

Mr. WEIL. The answer, I think, is that it depends. If there is appropriate labeling and notification; and if there is third company availability of a similar product; and if the country that wants to buy those products is aware of the concerns that we have here—and I'm not addressing myself specifically to tris, but to the generic property it represents—I would not be opposed to such exports.

I recognize there are people in this country that take a contrary view; who feel strongly that if we don't allow us to sell the product to

ourselves, we should not sell it overseas. But if it meets the test that I described and there is sufficient notification, I believe we should permit the export. This is, of course, the subject of a separate interagency review now under way. I would hesitate to preempt the results of that review.

The CHAIRMAN. Is it your view that the United States has any obligation to afford countries such notification on the banning of a product that has been declared a hazardous product in the United States?

Mr. WEIL. Well, I don't know that we have a legal obligation, but I think as a moral matter it would be desirable to make sure that if we have particular standards, we should make them known to the other party.

The CHAIRMAN. Are there any circumstances under which we should ban a product for exportation? And, if so, what are those circumstances?

Mr. WEIL. Well, I think there are circumstances where we know something is clearly injurious in a substantial way. But I think that those circumstances represent a very small proportion of potential exports from this country.

The CHAIRMAN. Well, if a product had been banned in the United States, you would have to assume that it was injurious in a substantial way, wouldn't you?

Mr. WEIL. Well, not necessarily, because we have been leaders in the world in terms of our concerns about certain things. For example, the risks taken in a steel mill in Japan, I'm told, are substantially greater than those that are taken in steel mills here. Our standards of occupational and product safety are different.

The CHAIRMAN. I don't think they have become aware of OSHA yet.

Mr. WEIL. I'm not altogether sure that is correct, Senator. If you knew that something was likely to seriously injure, or main, or kill, the people who use it, I think in that kind of situation, we would be justified in not wanting to sell it.

The drug thalidomide, for example, would meet that test.

The CHAIRMAN. What about labeling with respect to the exportation of a hazardous product? Should you notify customs officials or potential customers of the hazard presented by the product?

Mr. WEIL. Well, I think to some extent we are doing that now. Cigarettes, of course, come to mind.

The CHAIRMAN. How successful has the implementation of the notification section of the Toxic Substances Control Act been?

Mr. WEIL. I'm really not competent to answer that question. Apparently the regulations, with respect to notification have not been completed, and therefore there's been no experience.

EPA of course will have responsibility for the implementation of these regulations under that law.

The CHAIRMAN. Next we will hear from the Honorable C. Fred Bergsten, Assistant Secretary for International Affairs, Department of the Treasury.

Mr. WEIL. Mr. Chairman, thank you very much. With your indulgence, may I be excused?

The CHAIRMAN. Thank you very much. We appreciate your being here, Mr. Weil.

STATEMENT OF HON. C. FRED BERGSTEN, ASSISTANT SECRETARY OF THE TREASURY FOR INTERNATIONAL AFFAIRS

Mr. BERGSTEN. Mr. Chairman, thank you very much. I have submitted a statement for the record and, with your permission, I would like to highlight two or three issues. I will address myself to the broader context within which the President determined to go ahead with this export program which he announced earlier this week.

First, there are two major reasons why the United States needs a strong export expansion program at this point in time.

Th first is the immediate problem of the dollar. The President has indicated repeatedly his strong concern about the stability and strength of the dollar. He did so most recently on Monday of this week in appearing before the finance ministers and central bank governors of the world meeting here at the IMF annual meetings. We have an immediate need for a stronger dollar. Export expansion is an important component of our efforts to strengthen and stabilize the dollar.

Let me say that in context, Mr. Chairman, that there is important progress toward reducing our trade balance and improving, therefore, the external position of the United States.

If you take the last 9 months and group them into successive 3-month periods, you can see a substantial improvement in the U.S. trade balance. For the period from December 1977 through February of this year, the deficit was averaging on a monthly basis $3.1 billion.

For the period March to May of this year, it was cut by half a billion dollars to $2.6 billion. And for the most recent 3-month period, including the August numbers released yesterday, the deficit was down to $2.1 billion, another half-billion dollar decline.

So that in each of the last two 3-month periods we have seen declines of half a billion dollars in the monthly average deficit. That means a $1 billion decline in the average monthly deficit over the last three quarters—an improvement of $12 billion at an annual rate. In short, a dramatic reduction in our external deficit and an indication of significant improvement.

I might also add one interesting note that was widely shared at the meetings of the World Bank and IMF this week—at which I spent most of my week along with Secretary Blumenthal, and at which the financial and economic leaders of the world were gathered—that the outlook for the U.S. current account position is quite favorable.

Secretary Blumenthal, in his statement on Tuesday, foresaw a 30- to 40-percent reduction in the U.S. current account deficit next year. The other forecasters who were widely discussed at that meeting had more favorable views, seeing a reduction in our deficit in 1979 of anywhere between one-half and as much as two-thirds. So there is progress; there is clear progress already behind us. There is an outlook for further substantial progress next year, all of which is critically important to achieving the President's goal of strengthening and stabilizing the dollar in the exchange markets.

Now, one might ask: If that's true, why do you need a program of this type? The answer is quite clear. In the first place, we can't be sure that that progress is going to eventuate. Second, it is not enough any-

way. We need to do better and get the deficit down even further. Third, and perhaps most important, this is a long-term issue.

We have tried to frame this program very much having in mind the short-term problems of the dollar. But equally as important is the long-term structural need of the U.S. economy to concentrate more heavily on exports because of the changed structural position of the United States in the world economy.

Imports as a share of our gross national product have risen sharply and substantially and are going to stay much higher because of our greater reliance on imports of oil and other products as well.

We therefore need a concomitant increase in the share of our GNP that is devoted to exports. That number has already doubled over the last 15 years, showing that we can in fact do the job if we try harder. But we need to do more.

And, as Frank Weil indicated, even a 1-percentage point increase would get us an additional $20 billion of exports, which would be more than enough to wipe out our current account deficit.

So for a combination of reasons, immediate and longer run, this program is an essential part of our overall international economic strategy.

The second point I want to make is simply that any export expansion policy has to be extremely broad-based because our ability to export, of course, depends upon the competitive vitality and dynamism of our own economy. It has to include maintaining a price competitiveness, which means bringing inflation down, keeping it under control, and getting it down just as far as we can.

It means reversing the very disturbing productivity trends which have been extremely sluggish in this country, and which we clearly need to improve. Related to that, it means improving our technological base and assuring that adequate R. & D. is going into products that compete internationally as well as at home.

Very importantly, it means getting down foreign barriers to U.S. exports. All the competitiveness in the world doesn't help us if we can't get into foreign markets. And that is why the President has placed such a major stress on the multilateral trade negotiations in Geneva in an effort to reduce further tariff barriers to our exports, but more importantly to reduce and bring under international restraint the array of nontariff barriers which in areas like Government procurement and standards in licensing do impede our ability to sell abroad in the high technology industries where we do have comparative advantages. Not to mention, I should quickly add, agriculture where, of course, we have a dramatic comparative advantage and where we have made clear to our trading partners that meaningful concessions are essential if these trade negotiations are to succeed.

Finally, and related to that, we of course, have to make sure that other countries are not taking advantage of us through unfair competitive practices. That is one reason why we want to get major new international agreements to deal with the use of export subsidies, internal subsidies, export credits and a variety of other devices to make sure that we are not suffering from unfair competition in world markets.

Those are some of the elements that must be included in any comprehensive export expansion strategy, along with the more specific elements that we have put forward this week.

And, finally, Mr. Chairman. I think it is important to note that we can succeed in this effort. There is often a lost of pessimism around that the United States simply has a continental economy and therefore can't really make it in foreign markets compared with Germany, Japan, or some of the advanced developing countries, that our record is a dismal one, and that there is no way in which we are going to be able to compete effectively in world trade. That view is simply not supported by the facts.

As I indicated already, over the last 15 years without really much concentrated attention to it except by a small number of firms, the share of exports to our gross national product has doubled, showing that we can do it. Our price competitiveness is clearly very, very, good. The exchange rate changes that have already taken place have improved our competitive position pricewise over the last 1½ years. And we know that with the effort that is required, our firms can compete on an international basis.

We know, in fact, that 100 or 200 American firms are among the leading competitors in world trade. There is no reason why additional American firms with the proper effort and with the proper help from the Government can't do the same. The problem is, therefore, a major one for both the immediate and long-term reasons, and we have tried to develop a longer range comprehensive strategy to deal with it. We think it can succeed.

Thank you, Mr. Chairman.

The CHAIRMAN. I thank you for a fine statement, Mr. Bergsten. What was the Department of the Treasury's role in the interagency task force?

Mr. BERGSTEN. We played a very active role, Mr. Chairman, both in working on the overall program and working on specific parts of it. Our concern on the overall program is that which I mentioned today, that this is an integral element of the overall administration strategy to support the dollar, improve our external balance, and therefore contribute to the international monetary stability as well as our own domestic economy.

So at the level of overall policy development we worked very closely with our colleagues in Commerce and elsewhere. On the specific programs we had responsibility for some of the financial aspects of the package, the Export-Import Bank program in particular, working with John Moore and the leadership of the Bank itself.

The CHAIRMAN. If the first phase doesn't achieve satisfactory results, what kind of policies would be needed to achieve a stable dollar in the currency market?

Mr. BERGSTEN. Well, as I said, this of course is only part, albeit a very important part, of the overall program. We are working diligently on other parts of it, primarily the new anti-inflation program, the energy legislation, and gold sales which are reducing the U.S. trade deficit by $2 billion a year at an annual rate at the new level we'll begin selling in November. Thus, there is a number of elements outside this

particular package that are being stepped up and need to be stepped up to assure a strong dollar.

I think it is a little premature, Mr. Chairman, to ask what might come next in this particular area since the ink on this program is hardly dry yet. One can obviously imagine further steps along the same lines as we have discussed here in terms of Export-Import Bank lending and other programs. But I really do believe that at this point it is a little premature to say what might come next.

We've got a number of new elements here to try. I think we need to give them a fair shake and see how they, along with the other initiatives, work.

I would reiterate the comment I made at the start, that there is dramatic improveemnt over the last 9 months in the external position of the United States. There are unanimous forecasts from all those who have looked at it, both in the private sector and in Government and in international agencies. that our current account deficit is going to be down sharply next year. So I do think we have a fairly optimistic outlook.

The issue now is to make sure we achieve it and to keep it going beyond next year.

The CHAIRMAN. To what factors do you attribute the most recent improvement in the trade account?

Mr. BERGSTEN. I think there are two or three basic factors. Perhaps the most important is the convergence of growth rates between the major countries, something that you mentioned at the outset in your opening statement today, Mr. Chairman. Over the last 3 or 4 years we have had an anomalous situation with respect to the post-war period as a whole. Up until 1974–75 the U.S. economy grew at an annual rate of about 4 percent. And the rest of the industralized countries, the rest of the OECD grew at about 6 percent, meaning that our markets abroad were growing faster than our economy, affording us an opportunity to run the trade surplus that we usually did run.

In the last 3 years the situation has been reversed with a vengeance. The United States has recovered faster than any other country from the trough of the recession in 1975 and has been growing about 5 percent annually. The rest of the OECD has grown at only about 3 percent annually, meaning that instead of having our markets grow about 2 percent faster than we did, we grew about 2 percent faster than they did.

We have calculated that that alone cost us somewhere between $10 and $20 billion in our trade surplus, what are called income effects in economic jargon. That has now begun to turn around. Since we are now later in the recovery stage than other countries, naturally our growth rate has slowed down.

Other countries, as you mentioned, Mr. Chairman, particularly Germany and Japan, are now stimulating and expanding their economies more rapidly. In 1979 particularly, it will be the first year since the recession in which the historical situation is resumed, at least to the extent that other countries will be growing faster than the United States. That means our markets grow faster; we expand our exports.

The second thing is the change in price competitiveness as a result of the exchange rate, changes that have taken place over the last year to 18 months. That change has clearly improved the price competitiveness of the United States. Those factors play through with some time lag, taking full effect perhaps only after 2 or 3 years. So that as we

come into the latter part of this year and as we get into 1979, we will see significant improvement as a result of those changes.

There are a number of other minor factors in particular industries, but I think those are the two big elements that explain why our trade position has improved so sharply and why it is widely expected to improve next year.

The CHAIRMAN. Well, why has the deficit moved so erratically, then, if that latter case is true? Down to $1.6 billion in June, up $2.99 billion in July, and then down to $1.62 billion in August.

Mr. BERGSTEN. Well, Mr. Chairman, that is a good question, and one we have put to the statisticians without frankly getting too satisfactory an answer. There has been a change early this year in the way Customs collects these data, and we are not sure if the seasonal adjustment factors are yet appropriate for the new numbers. That may explain quite a lot of it.

That is why in the numbers I gave you at the outset of my statement I took 3-month averages for the last three 3-month periods and showed how in each of those last 3-month periods there has been a half billion dollar decline on a monthly average basis in the numbers.

I think grouping them in that way probably gives a more accurate picture and would tend to wash out some of these monthly aberrations which are statistical anomalies to some extent. But in any statistical series one can never rely on figures for too short a term, such as a month.

The CHAIRMAN. What kind of modification in the DISC program has the President agreed to?

Mr. BERGSTEN. Well, Mr. Chairman, that's an open question. I would have to say we do believe that the DISC has not been a cost effective measure. We have testified to that effect during the tax hearing this year. As this program evolved, we considered a wide number of possible means to develop more cost effective programs, modified DISC's, alternative approaches focused on trying to get small and medium businesses into the business of exporting for the first time. Those studies did not reach any definitive conclusion as to what might be an effective means of using the tax system to stimulate exports.

We would welcome suggestions and ideas on that as we carry out the evaluation that was mentioned by the President in his announcement on Tuesday.

The CHAIRMAN. It is possible the Congress may not agree to the President's proposal to phase out or reduce DISC's and to limit the tax benefits to the Americans under section 911 of the code.

If either or both of these events occur, would the disagreement constitute grounds for a Presidential veto?

Mr. BERGSTEN. Well, Mr. Chairman, I am delighted to say that I cannot give you a firm answer on that question. That is a decision obviously that the President would make in the context of the overall legislation before him. We have stated the administration's views clearly on that. We do recognize the reality of what is likely to emerge from the Congress, particularly on the DISC issue. The President will simply have to make that decision when he sees the bill in its totality before him.

The CHAIRMAN. Would the President be prepared to recommend programs to the Congress or agree to congressional initiatives if such

programs required significant expenditures beyond the proposed $20 million?

Mr. BERGSTEN. I think, Mr. Chairman, the administration would look at cost-effective proposals for promoting exports beyond what we have done now.

I did indicate, however, our feeling that this is a comprehensive and effective program to at least begin the process of expanding U.S. exports. I have tried to put it in the context of a number of programs, all aimed at improving our external position and strengthening the dollar. And I do think at this point in time the most prudent course is to see if what we have put together on this variety of fronts does work out, does achieve the kind of objectives that we think they will achieve, and therefore whether in fact something else is needed at some later point in time.

The CHAIRMAN. Is technology an important factor in our trade position.

Mr. BERGSTEN. It is very important, Mr. Chairman. U.S. comparative advantage runs highly to agricultural products and high technology industrial goods. This is a major aspect of the competitive position of any nation, notably including the United States. Frank Press in the White House now chairs a task force to look at the problem in an extensive way. It is something which is quite important to our overall international as well as domestic economic position.

The CHAIRMAN. Are you concerned about the support which foreign governments have given to their high technology industries, for example, aircraft, computers, et cetera?

Mr. BERGSTEN. We are concerned about that, Mr. Chairman. And it is an issue that we are trying to get at in a number of ways.

As I mentioned before, in the international trade negotiations, we are trying to get new rules of the game to deal with the various kinds of subsidy practices. There, of course, is the sticky issue between us and other countries as to what should be defined as a subsidy practice not permitted, whether the kind of measures you indicated should be included under that.

Other countries point to the fact that of course a lot of U.S. Government money has gone into the development of the U.S. aircraft industry and some of the other high technology industries which you mentioned. So the question of who has subsidized more and to what degree and in what ways is a matter of much debate between ourselves and other countries.

I can say one thing very categorically. Other countries frequently say that they must subsidize their high-technology industries because the United States has such a huge lead in those industries. Our answer to that is very clear. There have to be some industries in which we maintain a competitive lead if we are going to achieve the kind of trade balance and strength for the dollar that those very same countries tell us we have to achieve. And we are not going to sit idly by and permit them to improve their competitive position through unfair governmental involvement, to attack our international trade position in the very industries where we do have economic and competitive advantage.

We have made that clear to them in a number of fronts, in a number of specific cases recently, and we will continue to do so.

The CHAIRMAN. Does that imply that we may have to follow the European and Japanese example of financial and political support for these high-technology industries?

Mr. BERGSTEN. I hope not, because there are, as I suggest, two ways to go about it: You either fight it or join it. We are hoping to fight it, basically, by trying to convince other governments around the world that they are becoming directly involved in subsidizing their industries, particularly in these high technologies, and that this simply is not the way to go.

It costs governments money everywhere. It creates inefficiencies. It clearly creates pressures elsewhere, not only in the United States but around the world, for both emulation, meaning following the same kind of practices, and retaliations by raising trade barriers against such unfairly competing products.

We don't want to go down that route, and we're trying at the highest levels and in every way we can to get other countries to cease and desist. The results are mixed. In some cases we do succeed and some countries share our view that that is not the way to go. In other countries there is a strong view that they must do it and they are going down that road, and we have had conflict with them over those issues.

I can't say it is yet fully resolved, Mr. Chairman, but our strong desire is to avoid an international competitive race of R. & D. subsidies, export subsidies, whatever it may be. We simply don't think that is the right way or by any means the best way to achieve the kind of international economy or world that we want to live in.

The CHAIRMAN. Preliminary analyses by some economists suggest that changes in the composition of our exports and those of Japan and Germany, and the change in composition of our imports, indicate a shift in comparative advantage in manufacturing away from the United States. Would you comment on that?

Mr. BERGSTEN. I do not think the record supports that, Mr. Chairman. Even during periods when the U.S. trade balance as a whole has weakened, around the turn of the 1970's and again more recently, our competitive position in many, many manufacturing industries has stayed strong and even improved. I think it is fair to say that in some manufacturing industries we probably have seen a decline in our competitive advantage. But in others we have seen an increase in our surplus or however one wants to measure it. The U.S. share of world exports has actually risen.

So I would not make any blanket judgment, certainly, about our manufacturing sector and its international competitiveness. One has to look within that overall sector to see which particular industries are doing better and which are declining. It is even more complicated than that. In some cases, one has to look within a given industry because frequently particular product lines within an industry will be losing competitive advantage, but others will be increasing.

That is true even in the textile industry, for example, which many people have regarded as a not very competitive industry internationally. Yet in some product lines, apparel and textiles more broadly, U.S. exports have been on the rise over the last year or two.

So one has to be careful and disaggregate before making judgments as to which particular areas the United States is doing well in and where we are in trouble.

The CHAIRMAN. What role do you anticipate Treasury would play in the industrial innovation policy and review under the direction of Assistant Secretary of Commerce, Jordan Baruch?

Mr. BERGSTEN. Well, this is not an area where Treasury has had the lead. But both my own part of Treasury, the international side, and more so the economic policy side under Assistant Secretary Brill, are participating in that exercise, and working with them in creative approaches to the issue. It is one where we will try to do our best to come up with thoughts, ideas, and proposals to add to the overall package, because of the concern that we share for dealing with the problem equitably.

The CHAIRMAN. How much in monetary and personnel resources does the Department of Treasury devote to the international trade, particularly export?

Mr. BERGSTEN. I can't give you a precise figure, Mr. Chairman. The international part of the Treasury, which is my office, deals with a wide variety of issues, practically all of which relate to trade in one way or another, through trying to get down foreign barriers, work on international monetary stability, and work on other trade issues directly. But I can't give you a precise figure on export promotion per se, because it is so interrelated in the overall operation, and it is so aimed at the international problems taken as a totality.

Our overall budget for the international component of the Treasury is about $23 million in this fiscal year, and all of that either relates directly or indirectly to our effort to strengthen the international economic position of the United States.

The. CHAIRMAN. Senator Stevenson.?

Senator STEVENSON. Thank you, Mr. Chairman. I commend you, Mr. Chairman, for holding this hearing, and also the administration for finally facing up to the importance of exports.

But I have to say that this program is a weak one. However, it is my impression that it is not intended to be the whole program. It is a beginning, and if so, I think we can all commend the administration for at least starting.

The Banking Committee, which has the general jurdiction over exports, has been holding hearings for many months now on export policy and American competitiveness in the world. The results of those hearings offer us very little comfort notwithstanding the proponents of economic orthodoxy with their euphemistic theories about the effects of that convergence of growth rates and their expectations about the effects of floating exchange rates and depreciating dollars.

This is a world in which their theories are one of many factors. We have found that one of the principal problems is an attitudinal one. The United States, outside the agricultural community, has not had to export to prosper and survive. We have relied upon internal markets. To the extent we do export, it is through the largest corporations. There are trickle-down benefits, of course, but there is very little effort by American industry, especially its small businesses, to sell abroad. We have never really recognized the global dimensions of the marketplace.

How do you propose to change that attitude? In particular, do you see a role for the Treasury, the Comptroller, and the Fed in enlisting the banks, especially the largest banks and their correspondent banks, in an effort to provide the services and the credit facilities that are

necessary to facilitate the export trade and to educate businesses in every community throughout the country.

So this is a twofold question. Our efforts to answer it indicate that the banks could play a major role if they were activated. The suggestion to the Treasury and other agencies of Government to enlist their help has been made. What do we do to change their attitude and what is your agency doing, if anything, to involve those banks?

Mr. BERGSTEN. I'm sorry that Frank Weil has gone because this, of course, has been one of his major objectives in this whole exercise, to increase the awareness and deal precisely with the attitudinal problem which you raise, which we fully agree is probably at the core of the problem. The program we have put together does attempt to do that in several ways. Perhaps the two most important of those are: First, to educate the American public, the business community, labor and others, about the critical national importance of exports, going beyond simply the benefits to the firms themselves to how critical it is for us in a national sense to increase exports as a share of our economic output.

Senator STEVENSON. But how? Or are you coming to that?

Mr. BERGSTEN. Well, through Presidential involvement, statements of the type made this week, repeated statements by Cabinet officials, and the kind of marketing seminars around the country that are envisaged as part of this beefed-up effort by the Commerce Department to bring to the business community very directly overseas marketing opportunities, ways to get to those markets, and the help that can be provided by the Federal Government.

It is a combination of saying that it is important nationally, with statements by national leaders, including the President personally, to try to inject that consciousness into the mentality of the people who are involved; and then, at the grassroots level, to carry out a sharply increased series of market promotion efforts, to demonstrate to the firms themselves around the country how to do it, what the opportunities are, what the markets may provide, and what the techniques are for going into them.

The President spoke, I thought, quite eloquently on this Tuesday in the White House when he was unveiling the program, harkening back to his efforts when he was Governor of Georgia, and his own efforts as a farmer when he had wanted to export but had not known the techniques involved, how to deal with other countries and foreign currencies, the complexities of selling abroad, and how as Governor of Georgia he had made efforts through marketing seminars and trips abroad for businessmen in his State to make them aware of the opportunities.

This is the kind of thing now that we're going to try to do at the national level, both through broad statements from the top to try to invade the consciousness on the issue; but then at the precise level of the actors themselves, the firms, to show how to do it.

I think there is another critical part of the program, though, Senator, which we are very sincerely going to try to carry out, and that is to change the psychology of how the Government in its policy manifestation views exports. We're all too aware of the fact that the Government has frequently gotten in the way of exports. It has done it as a matter of general policy in some cases. It has done it in specific cases, not really intending to do that, but having that come along

as a byproduct of what we have done in a variety of areas listed on the charts.

If we can bring at least a better balance into those policies, where the export effort is encouraged and not impeded, where the export need of the country is balanced more effectively vis-a-vis other policy objectives, which we are not abandoning, but nevertheless want to balance. That, I would think from my extensive discussions with businessmen, potential exporters and existing exporters, could make quite a large difference in getting increased output.

Now, you raised a very important question about increasing the role of the banks in the process. I think you are right on that. I think we have not done enough on it. I know that Assistant Secretary Weil has that as one of the measures that we are going to try to pursue, and I think we at Treasury, and perhaps along with the Comptroller and the Fed, should do more.

We have talked a great deal to individual bankers about it. I think we have not done enough systematically, and I think we should put together a program along that line, and I will promise you that we will go back and try to develop one.

Senator STEVENSON. Good. Thank you.

I certainly agree that the wounds are largely self-inflicted, and also take some comfort from the suggestion that this administration does have a good, forward-looking policy.

Are you suggesting a change in the human rights policy? What about amending NEPA to exempt the activities of Eximbank from environmental impact filing requirements. We are about to act on the Eximbank legislation, and we have been waiting now for a long time for the administration to develop a policy with respect to the applicability of NEPA. I had tried to heal one of the wounds by obtaining adoption in the Banking Committee of an amendment that would make it clear that NEPA didn't apply to the financings of the Eximbank.

Will the administration announce support for my amendment?

Mr. BERGSTEN. I tried to make clear in my comments, and the other witnesses did earlier, that the administration is certainly not abandoning human rights or environmental objectives, but rather, trying to bring a better balance between exports and those objectives in the implementation of particular programs.

On the environmental issue, the President indicated on Tuesday that he will shortly be issuing an Executive order that hopefully will clarify the situation by indicating that the environmental impact statements will not be required for export-related actions that have potential environmental effects in foreign countries. That is a clarification of NEPA which we think would make clear that it should not impede——

Senator STEVENSON. Let me interrupt you at that point. You have no authority to clarify NEPA. NEPA is an act of the Congress. You can't amend it. You could adopt administrative policies that would subject, for example, the Eximbank financings to new rules and regulations which require some environmental considerations. But you can't repeal NEPA. At this moment the courts have not determined what the effect of NEPA is. That is why I asked whether you support legislation which makes it clear that the NEPA does not apply, so that

the administration's authority to promote export financing would be unencumbered.

Mr. BERGSTEN. I was not suggesting that we would try to repeal NEPA through an Executive order, only that we would try to clarify the interpretation of NEPA as it applies to exports, which is something that, as you suggest, in the court cases is a grey area. And we have felt that by issuing the order that was announced on Tuesday we would make clear at least the administration's interpretation of how that would apply.

I think John Moore might want to comment on this.

Senator STEVENSON. Well, I will come to John a little later, if I may.

Mr. NORDHAUS. Mr. Chairman, it is my understanding that this has not been finally resolved, but the Executive order under discussion will be issued under the President's own authority. And the reference to NEPA is a resolution attempting to resolve the uncertainty revolving arount executive interpretation, which is not a question of acting or changing the law, but simply an Executive order by the President.

Senator STEVENSON. My point is that your interpretation of the law doesn't change the law. If your interpretation includes a policy which the administration feels should be followed with respect to the consideration of environmental factors in Eximbank activities, then to make clear that you have the authority to adopt that policy, you ought to support my amendment since NEPA might otherwise require full compliance including environmental impact statements on Exim financing. So it ought to give itself the clear authority to implement its own proposed policy by supporting my amendment.

Mr. BERGSTEN. Senator, your logic is hard to fight. I have to admit I have not followed the ups and downs of the development of the administration's position on this over the last few days. But I was just checking. We do feel that the steps that the President is taking through the Executive order does clarify administratively that Eximbank activities will not be unduly hampered by the application of NEPA, and that that therefore deals with the problem effectively in avoiding the difficulties of the type that you and we are both trying to avoid.

The CHAIRMAN. If the Senator would yield, if that is the case and that is your feeling, then you should have no reluctance about supporting Senator Stevenson's amendment, it seems to me, because his amendment would just make it absolutely clear in that regard.

Mr. BERGSTEN. As I said, Mr. Chairman, I am not going to quarrel too sharply with the logic of both Senators on this question.

Senator STEVENSON. Well, who does quarrel with that logic?

Mr. BERGSTEN. Well, I tried to get help up here to discuss it, Senator Stevenson.

Senator STEVENSON. Well, we all know where the quarrel arises. What I don't understand is why, accepting the logic, this administration can't agree publicly to give itself the authority that it wants and is not now clear.

Mr. BERGSTEN. Well, I would only respond to that by saying we do think that the President's statement on Tuesday and the Executive order he will sign make the situation clear in terms of avoiding the practical adverse impact on Exim sales from the application of U.S. environmental law. We do think the practical problem has been handled.

As you well know, there are broader implications of amendments here or Executive orders there as to how the overall environmental policy applies. That is the issue that you know all too well has prevented us from coming to an agreement on this particular amendment. But we fully share the view that the problem has got to be handled. And we simply have different ways to go about it that we think would be effective.

Senator STEVENSON. OK. I'm not going to press it, but it's obvious you can't change the law.

Now, just a couple of other questions. You mentioned that there's going to be an effort to change the attitudes of the country by bringing marketing opportunities to the attention of businessmen. In that conjunction the President has directed OMB to allocate an additional $20 million for export promotion by Commerce and State.

I'm sorry I missed Frank Weil, too. However, is the administration seeking an appropriation of $20 million more than current levels for export promotion, or are we just shuffling funds?

Mr. BERGSTEN. No, as I understand it, $10 million of the $20 million is being reprogramed by the Departments, mainly by Commerce, from other activities. There would be a net increase of $10 million in their total budget for which they would seek an appropriation.

Senator STEVENSON. A net increase of how much?

Mr. BERGSTEN. $10 million, that is my understanding. It is a net increase of $10 million that would be sought for fiscal 1980, I believe.

Senator STEVENSON. Now, with respect to DISC's, the President in his statement made a sort of significant comment which certainly does not sound as intransigent on this subject as some of his earlier statements. He said, "I continue to urge Congress to phase this out," and then he added, "or at least make it simpler, less costly, and more effective than it is now. And my administration stands ready to work with the Congress toward that goal." Close quote.

How would the administration make DISC's simpler, less costly, and more effective?

Mr. BERGSTEN. Well, Senator, this is a very significant statement. I am glad you picked up on it, because this is clearly one of the central issues in discussing the role the U.S. Government can play in promoting the export expansion effort.

The reasons why the administration opposes DISC's are well known: It has not generated additional exports consonant with the budgetary cost. What this phrase that you asked about means is that we, working with you, would like to try to think through over the coming months how one might get a more cost-effective tax measure in this area, to see if we can come up with one.

We the administration have thought of many different variants.

Senator STEVENSON. Let me just interrupt you at that point. We are going to be acting on the tax bill in just a few days. The President says, first of all, to phase it out—and you're saying over a period of months we ought to be working together to try to make it more effective.

Can I infer from that statement that when the Congress considers the tax bill, we should take no action with respect to DISC's in anticipation of this future cooperative effort which you have just mentioned?

Mr. BERGSTEN. Now, I think the President and the administration, the Secretary, and everybody have made clear our continued opposition to the existing DISC's. One could knock it out as you proposed and then start from that base.

Senator STEVENSON. He proposes to phase it out. Are we phasing it out or knocking it out?

Mr. BERGSTEN. The proposal on the table now is really a phaseout, given the buildup of past credits and all that. But whether one eliminates it and starts afresh, which is our preference, or modifies downward from where it is now, or sideways, whichever way it comes out, our basic point is that if we can come up—"we" meaning the Congress and the administration together—can come up with a demonstrably cost-effective means in this area, that what the President has said this week indicates his open mind toward that.

I was going to say that we in the administration have thought of a variety of means trying to link the tax benefits more directly to incremental exports or altering the nature of the rules under which the benefits can be taken, perhaps orienting it more toward smaller- and medium-sized businesses that may need a better entry support into the exporting business.

There are a number of ways that we have tried to work with it ourselves. I know there have been a number of suggestions from the Congress, and we would like to work together toward these various ideas to see whether we can come up with an arrangement which we would both agree would be a cost-effective way to go about it.

That is where we stand. We do not imagine that being worked out then in the next 2 or 3 days, before this year's tax bill is finalized, but we certainly would like to work with you on it over the coming months.

Senator STEVENSON. My last question, Mr. Chairman, and I apologize for taking so long, and this is primarily to Mr. Nordhaus.

Mr. Nordaus, isn't a farm policy which supports farm prices at artificial levels through price supports and expensive, inefficient set-asides, pricing American farm commodities out of foreign markets? Doesn't the consequent high price of feed make it virtually impossible for the United States to export red meat? Would it not be possible to devise a farm policy which supports farmers at reasonable production cost levels with emphasis on target price levels, permitting farm prices to be determined in the market—though perhaps with a floor—with the result that we would suffer much less inflation and also enlarge our market oppotrunities throughout the world for feedgrains and beans and create them for red meats?

Mr. NORDHAUS. I think you have raised an important question of agricultural policy. I would generally answer "Yes" to your question. We do, by our national policy of a combination of farm price supports and set-asides in years of good harvests, clearly raise the market price levels and, therefore, prices of exports above what they would otherwise be.

Whether it hurts the value of exports is a more complicated question. Really, I would just have two comments on that.

As you know, the administration has consistently over the last year and a half tried to keep the legislation in this area from raising prices.

We have not always been successful. We have been a moderating influence—I think—on some of the more extreme congressional proposals.

But on the more important question, as you know, over the last 20 years we have moved away from an implementation of our farm programs, which was essentially only operating through market prices, toward one which now is a mixture of farm prices and income support target payments. And as of today, actually it is virtually complete in the form of target prices. Wheat prices today are somewhat around 50 percent above the loan price. Corn recently was for the most of the year above.

But I would say as of now the loan rates themselves and the price support programs themselves are not a significant factor in impeding exports and raising prices. Set-asides are a more difficult question, and, I guess, on all of these things I would say that exports have played too little a role in the thinking of the country as a whole. People have not paid sufficient attention, and it is true in this area and agricultural policy as well as many other legislative areas.

Part of the thrust of the President's program is to assure that exports weigh in on these decisions.

Senator STEVENSON. Well, you have not addressed yourself to meat. This policy of supporting feed for livestock makes it difficult to export red meat, and, in fact, we end up protecting our livestock producers as do other countries. It would be more efficient to export meat and feedgrains. It makes more sense for everybody, the importer and the exporter, for us to sell the hogs to Poland instead of soybeans, with which they can produce the hogs that we buy back.

You mentioned farm policy in the Congress. I do not mean to suggest for 1 minute that the Congress should or ever would bend the farmer. The world does not need to be told by junketing farm leaders and governors where the soybeans come from. Foreign purchasers know where they come from.

What we need is some basic change up and down the line. I would hope, therefore, that the administration might consider in conjunction with exports and the welfare of the farmer the welfare of our economy because of the inflationary implications of existing farm policy. We need a basic change in farm policy to support farmers in a very different way by permitting prices to be determined by the market at least for the short term.

Mr. NORDHAUS. Senator, we really do agree with you on that. We have consistently urged the use of more reliance on target pricing and support payments. As you know, the administration's sugar bill was a dramatic example of a reversal of the old policy using import quotas and fees only, toward one of accommodation of fees and income support payments.

I don't know how that is finally going to end up, but we are strongly committed to the principle. For some reason, however, farmers like the security of the market prices more than they do receiving a check from the Federal Treasury. They are very reluctant to rely upon support payments instead of cash for their crops. But I think we have made a lot of progress in this area over the last 2 years, and I just think we have to continue. I think you are absolutely right about the direction, and we have to move in this direction.

Senator STEVENSON. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Stevenson.

Thank you very much, Mr. Bergsten. We appreciate your being here.

STATEMENT OF C. FRED BERGSTEN, ASSISTANT SECRETARY OF THE TREASURY FOR INTERNATIONAL AFFAIRS

THE FRAMEWORK FOR A NEW EXPORT POLICY

In 1977, the United States incurred the largest current account deficit in its history—$15 billion. The trade deficit has remained large during the first seven months of 1978. Underlying trends in trade flows suggest that the deficit has been diminishing since February.[1] As a result of faster growth abroad, somewhat slower growth in the United States, and the increased price competitiveness of U.S. goods, the current account deficit should continue to decline during the next several quarters.

But we cannot simply rely on a forecast of better times.

A large deficit undermines the strength of the dollar which in turn fuels inflation and leads nations around the world to question our ability to successfully manage our own economy. We must take visible policy steps to turn the adverse current account figures around.

Correction of the deficit will take time. But the clear message, both from the exchange markets and from our trading partners, is that we must act now in a forceful and decisive fashion to reduce the deficit. The export policy announced by the President on Tuesday is an important part of the Administration's response to the deficit, and to the position of the dollar in the exchange markets. The other central elements of that response include the new anti-inflation program which the President will announce shortly, the energy program now nearing passage by the Congress, tightening of monetary policy by the Federal Reserve, gold sales by Treasury and other "bridging" actions. The direct effort to expand N.S. exports is an integral part of the overall package.

THE EXPORT PROBLEM

The U.S. export problem, and the new export policy, go beyond our immediate concern for the dollar and our current account deficit. The United States has simply never had to emphasize exports as have other countries. U.S. manufacturers have been content with supplying the large U.S. market and have never really focused on exports.

Our growing economic dependence on the rest of the world now dictates that we become more attuned to exports—just as we must learn to use energy more efficiently and just as some of our major trading partners, notably Japan, must become more attuned to imports. The measures announced by the President on Tuesday do not offer a quick fix, for the simple reason that we must address a long-term structural problem.

Over the past two decades, U.S. exports have grown at only half the rate of other industrial nations. The U.S. share of total manufactured exports by 15 industrial countries hit its low point of 19.2 percent in 1972, and then rose to 21.1 percent in 1975. Since then, our export share has retreated to its 1972 level. In the first quarter of 1978 it fell further to 18.9, the lowest since mid-1972.

Our competitors, by contrast, have managed a real export growth rate (even excluding their exports to the United States) of nearly 4 percent per year since 1974 despite slow worldwide economic growth.

There are several reasons for these developments. Our major markets, such as Canada and Latin America, have grown more slowly than the major markets of some of our competitors. A number of advanced developing countries (ADCs), primarily in East Asia, have seized a significant market share from all industrialized countries. The appreciation of the dollar in 1975 hampered our price competitiveness in the recent past and has affected our export performance. In addition, exchange rate changes of late 1977—early 1978 are distorting short-run trade shares which are calculated in value terms expressed in dollars. But our deep-seated national indifference to exports—both in the private sector and in

[1] Monthly trade figures (Census Basis) showed a sharp drop in the deficit in August 1978 ($1.62 billion) following a sharp rise in July 1978 ($2.99 billion) which in turn came after a sharp drop in June 1978 ($1.60 billion). Month-to-month figures are often erratic, but the underlying trend clearly seems to indicate a declining deficit.

the U.S. Government—has clearly played a role. Such indifference is now simply too costly.

INCREASING U.S. EXPORTS

A better export performance by the United States would spur growth in our economy and create jobs. Stronger exports would help stem the decline in the value of the dollar and thus fight inflation. But increasing our exports presents a major challenge to business, to labor and to the U.S. Government. It requires attention to many factors—including productivity, price competitiveness, industrial innovation and initiative, and Government policies.

A key determinant of U.S. competitiveness abroad is the productivity of our domestic economy. Productivity largely depends on new investment. In the last five years, productive capital per worker has been virtually stagnant—resulting in a sharp reduction in productivity growth. The Administration's tax recommendations sent to the Congress this year are designed to stimulate capital formation and national productivity.

Another determinant of U.S. competitiveness abroad is the rate of inflation. Excessive inflation here, particularly by comparison with Germany and Japan, has eroded our international competitiveness. the President's anti-inflation program will consist of a broad set of measures designed to bring down the U.S. inflation rate. As those measures take effect, our trade position will improve.

The United States has traditionally enjoyed a comparative advantage in high technology exports. To assure that this advantage is maintained, we have established a task force to examine both public and private research and development efforts. The task force will concentrate on regulatory policies that stifle U.S. inventiveness. Its proposals will further strengthen our economy at home, and its ability to meet competition from abroad.

We are also taking important international initiatives to improve U.S. export performance. Trade restrictions imposed by other countries inhibit our ability to export. Tariff, and especially non-tariff, barriers restrict our ability to develop new foreign markets and expand existing ones. We have been aggresively attacking these barriers through the Multilateral Trade Negotions in Geneva. We are encouraged by the progress to date; the intensity of the negotiations is increasing as we approach the December 15 deadline.

Foreign governments have increased the financial credits and subsidies oflered to their own exporters, sometimes to the disadvantage of U.S. exporters. We have addressed this problem in three ways. First, we have negotiated an International Arrangement governing the use of government financing of exports. Second, the Multilateral Trade Negotiations, we are negotiating an international code to restrict the use of government subsidies for exports—to assure that U.S. exporters do not face unfair competition. Third, if foreign government competition in the area of export financing cannot be restrained, we will meet it by appropriate matching programs.

U.S. Government regulations have also had a negative impact on U.S. export performance. In order to achieve a varied range of foreign policy objectives, the U.S. Government has restricted the sales of certain items to particular countries. Not only have these policies directly reduced sales, they have had a chilling effect on other potential sales of unrestricted items. The United States is gaining an image of an unreliable supplier.

Foreign purchasers, even though not currently restricted, may decide to buy elsewhere for fear that they may be cut off in the future. The new export policy seeks to confine the negative export impact of other policies to those few cases where vital national interests are at stake.

THE OUTLOOK FOR THE FUTURE

All these efforts are important elements in our attempt to increase our export growth. But they are not sufficient in themselves. Our export priorities must be changed.

In the course of Government policy-making, export consequences are frequently outweighed by other national objectives. Business, as well, too often places insufficient priority on exporting. Too many companies do not believe that exporting is worth the effort.

International economic changes over the past year have altered the fundamental conditions. U.S. businessmen need to take a new look at these changed conditions.

First, changes in the value of the dollar in relation to the currencies of some of our major trading partners have dramatically enhanced the price competitiveness of U.S. goods. U.S. manufacturers who may not have been competitive a year ago may now find they can compete quite successfully. A U.S. manufactured item selling for $100 in June 1977 cost 235 German marks or 27,200 Japanese yen. That same $100 manufactured item today costs only 196 German marks or 18,800 Japanese yen, declines of 16.6 percent and 30.9 percent respectively. Thus U.S. products are significantly more competitive in Germany and Japan as well as against products of those countries in third markets.

Second, the wage gap between U.S. workers and workers in other countries has been closing. No longer is it cheaper to manufacture many products abroad and import them into the United States. In Japan wage rates have jumped from 53 percent of the U.S. wage in 1977 to 72 percent in August 1978. Wages in Germany are now equal to or higher than in the United States for several industries. This is a significant factor that both U.S. and foreign firms take into account when they consider whether to locate a new plant in the United States or abroad.

Third, we are doing something right. The share of exports in our GNP has increased significantly in recent years—rising from 4.1 percent in 1971 to 6.4 percent in 1977. But this share needs to rise even further: every percentage point will add over $20 billion of export sales, enough to completely eliminate our current account deficit.

In conclusion, it is clear that the U.S. current account deficit is too large. Recent exchange rate adjustments have helped, but additional public and private measures are also needed. Those measures should be targeted directed at our trade problems—be they oil imports, excessive inflation in the United States, or inadequate export growth. The new export policy is a critical element in our overall strategy.

The CHAIRMAN. The next witness will be Mr. John L. Moore, the President and Chairman of the Export-Import Bank.

And, Mr. Nordhaus, if we may just defer you to a little later, Mr. Moore, has a meeting shortly, and we want to get some of the business people in ahead of you, as well.

Mr. NORDHAUS. Mr. Chairman, I am going to have to leave at 12:30, so it is up to you.

The CHAIRMAN. Well, we will try to move as rapidly as we can.

All right, Mr. Moore.

STATEMENT OF JOHN L. MOORE, JR., PRESIDENT AND CHAIRMAN, EXPORT-IMPORT BANK OF THE UNITED STATES

Mr. MOORE. Mr. Chairman, perhaps I might just dispense with the reading of the statement and just ask for questions. As an alternative, I could give a portion of the statement.

The CHAIRMAN. Why don't you just briefly summarize it, if you can.

Mr. MOORE. I think it best to speak just to the future questions for us at the Eximbank. I think the basic directions of our activity are now established. The new export policy increases the authorization or the recommended budget authorization considered by Congress for fiscal year 1980 by $500 million from $3.6 billion to $4.1 billion. This will allow us to fund both a broader range of projects and have an important balance of payments effects for the United States. The President's decision to reduce various internal barriers to our exports should also be a key factor in encouraging exports.

The main determinants of our success will be the responses of other nations. At both the London and Bonn summit conferences our major trading partners made clear commitments to increasing their economic

growth rates. This is critical to us, not only because it will increase our exports to the wealthy countries, but because the developing countries, Eximbank's major markets, grow more slowly when the wealthy countries are not expanding rapidly.

These growth limits are especially significant because other countries, like Britain and France, have their own balance of payments problems and often find a need to give aggressive support to their own exports, usually in direct competition with us. To the extent that the entire developed world grew more quickly, we might see some easing of the intense export financing competition we now face.

There are, as well, several other factors which would have a key effect on the demand for Export-Import Bank financing and our success in closing the balance-of-payments gap. The results of the multilateral trade negotiations could have a very positive effect by reducing barriers to our exports. It is, also, important that other governments agree to limit subsidies to their various export industries.

In addition, we will need to be extremely careful in monitoring how our major trading competitors proceed with their export financing programs. We have shown in our recent report to the U.S. Congress on export credit competition—and we have extra copies of this report here for committee members or others present who would like to have them—both the Japanese and French still have considerably more flexibility in the programs they offer on export credit, and we will need to be persistent in making sure that they do not further expand the already intense competition in this area.

The President's recent decision to set the framework for a comprehensive U.S. export policy by decreasing the domestic regulations which limit exports and by increasing the Eximbank authorization limit by an additional $500 million in fiscal 1980, the President has demonstrated to the world that we are taking our balance of payments problem seriously.

In the last year at Eximbank, not only have we increased the size of our programs, but we have established a new set of policies that will make it cheaper and less cumbersome for U.S. exporters to use our services. The basis has thus been laid for dealing with a critical part of the U.S. balance of payments problem.

The response of our major trading partners and our general success of handling our macroeconomic policies will, however, shape the final results.

Thank you. And I would be glad to respond to any questions.

The CHAIRMAN. There is a meeting on export credits planned next month for Paris. Assuming that the industrialized exporting countries do not reach a new agreement to limit export credits, what action is the Eximbank prepared to take to meet the credit competition?

Mr. MOORE. Let me answer in the way I see it. We would all have to formulate an exact policy in the unhappy circumstance full cooperation does not occur. I believe—and Congress in both the Senate and the House has given clear direction to the administration on this point—that we must match other nation's offers in many instances, even where we do not like the practices abroad. We are going to have to let the other trading partners know that we will match. And that will mean matching in circumstances where there have been subsidized interest rates or other kinds of indirect subsidies which affect the price

of the goods being sold. In some cases, however, our resources are not great enough to handle exact matching.

If we do not receive some of the concessions we think are reasonable from our vantage point, then I think one other approach we may have to take is to go beyond matching and extend the term for repayment. The Europeans have liked to subsidize the interest rates charged abroad in export credit, but have wanted to keep the terms of repayment extraordinarily short, as compared to what domestic companies would borrow in the United States.

So, another tool which may be necessary in order to make them understand the seriousness of the U.S. resolve would be to go beyond matching.

The CHAIRMAN. How do you plan to achieve the President's objective of increasing interest rate flexibility, length of loans, and percentage of financial transactions covered by the Bank?

Mr. MOORE. We have already been engaged in doing this. Under the prior administration of the Bank, there was the so-called "typical package," which supported that portion of the credit that would not be taken by the private banks.

Unfortunately, this approach, in competition with the kind of support given the other nations meant that many, many deals were lost to the United States. Business of the Bank decreased from the level of about $3.2 billion to $700 million under that approach, and I genuinely believe the reason for it is because we were not competitive.

To address what our exporters need abroad in the way of financing support, we have presently expanded the percentage of cover that we afford by direct loans of our funds, which has the effect of giving a package with a fixed rate of interest that can be made directly competitive with the foreign office. This is the principal way.

The CHAIRMAN. Only a small fraction of our total export volume is supported by Government credits, approximately 7 percent compared to 42 percent in Japan.

Is there a level at which you think U.S. Government credit support would exceed reasonable needs, and are we anywhere near approaching that level?

Mr. MOORE. Based on past experience, it would appear that the other 90-some percent of our exports go forward either for cash or with private credit sources without need for Eximbank.

I certainly would not propose that we expand the percentage we cover, except where necessary, where we truly think each sale would be additional if we act. And for us to intervene in any sales which are already cash or can be handled by the private sector is unwise. It is my own belief that an increase from something like 7 to 10 percent of U.S. trade is in order, because I think that is about the volume that we see in the large projects where our direct loan support is needed. That expansion would be in the range of, say, $5 to $6 and maybe as much as $10 billion a year of exports for large products.

The CHAIRMAN. Precisely what is planned to make the Bank more accessible to agricultural exporters?

Mr. MOORE. We have designed a new insurance policy which has just been announced this week, which is based on the concept that we will preapprove credits abroad within stated limits, principally for banks abroad who usually are the buyers of agricultural products, and we

will have insurance available to exporters and bankers in this country where, within those limits, they can commit us immediately and have our insurance covered.

In designing this, we think it will work. We have worked in cooperation with the private banks in developing this program. We think it can work well because the typical bulk sale needs to be committed very quickly, and we simply would not be able to get the service if we had to take the time to analyze before the particular sale is completed abroad.

So, we are doing it on a preapproval basis. We will see if the banks need this support. They say that they will probably use it in a good many instances. And in the course of developing this program, we were able to reduce and revise the method of charging the premium.

The CHAIRMAN. Senator Stevenson?

Senator STEVENSON. Thank you, Mr. Chairman.

Mr. Moore, the President said that the budget authority for fiscal 1980 for loans by the Bank would be increased by $500 million. The real ceilings are in the authorization bill, are they not? That is the bill that we will be acting on in the next few days. Isn't that proposal to increase that budget authority a mere slight of hand?

Mr. MOORE. I do not think so. I think, within a given year the amount we are authorized by the budget to commit is more critical within that year. Now, if we ran out of the statutory authority, we would have to stop.

Senator STEVENSON. And we are not getting the last-minute request for an increase in that authority, which, I grant you, is going to be increased substantially.

Mr. MOORE. I think that the amount that we asked much earlier in the year, the increased $40 million of authorization, will cover this volume plus keeping that same increase in volume through the 5-year period, Senator.

Senator STEVENSON. Well, that is my point. I do not think there is a real increase here at all, because it is governed by the basic legislation, and that is not going to be changed.

Would you be benefited by a real change of $500 million appropriation, so that you could be better able to match the foreign official credit agencies? What I have in mind is not the increase in budget authority, but an actual $500 million appropriation that would increase your capital. You have capital ceilings to deal with, also.

Mr. MOORE. I do not think that we need it to do the job we want to do in the coming year. I thought you were perhaps suggesting something different, which was a $500 million appropriation to spend over some period of time where we have to lend below our cost of money in order to match competition abroad.

Senator STEVENSON. No; we are going to take care of that. At least you are going to have the authority in the authorizing legislation to offer credit on terms to match the competition whatever it is anywhere. I hope it does not have to be used. What I wonder about now is an increase in your capital.

Mr. MOORE. I believe our capital base, which is right now at $3 billion, is adequate to handle the loan portfolio we have in the coming 5 years, even with our plans for increased activity.

Senator STEVENSON. How many years?

Mr. MOORE. Five. The coming 5 years that we are addressing in the legislation now. I just do not think the buildup of business will be great enough to make that capital base appear inadequate. Naturally, any amount you add into it gives us greater security. I do not think it should have as high a priority, probably, Senator, as trying to balance the Federal Government budget in the present circumstances. I might give you a different answer 3 years from now.

Senator STEVENSON. In the past the administration has opposed intermediate term CCC credits for the support of agricultural exports and this has led to pressures on the Bank to get deeper into the business of supporting agricultural exports. We have discussed this before. I think we both agree that CCC should support agricultural commodities and banks should support nonagricultural commodities.

If the President has now changed to support intermediate credits in the Agricultural Trade Act, it will help us in our consideration of the Exim legislation very shortly. We will be able to point to the probability of intermediate credit authority for CCC and be able to argue more precisely that Exim should not be supporting agricultural commodities.

Has the administration's policy changed with respect to intermediate credits for CCC and the support of agricultural exports?

Mr. MOORE. I believe it it is in a statement that came out, Senator Stevenson, and I was just trying to check it. It would be in selected cases only.

Senator STEVENSON. What does that mean since the CCC has no authority now? Are we talking about livestock here?

Mr. MOORE. I think we are probably talking about livestock. There has also been discussion of one other possibility and it may be alluding to that, which is that the Eximbank and the USDA might work together in the financing of agricultural receiving facilities. And in that connection there might be an intermediate credit which the foreign government would take the like amount of domestic currency and invest in some of these infrastructure facilities.

Senator STEVENSON. Well, I don't think there is any controversy over that.

Is there a representative of the Agriculture Department present who can tell us what these selective instances are? Is the administration still opposing intermediate CCC credit for the support of agricultural commodities except livestock?

Mr. MINYARD. Except for livestock and for building emergency reserves within the international wheat agreement. Those are the two areas that the administration is supporting.

Senator STEVENSON. So there is no change in the administration policy with respect to the support of agricultural exports and nothing new in this program. That is right, isn't it?

Mr. MOORE. I think that is right. That is basically it, and I would like to state the reason, Senator. We believe that in every instance we know of so far that other nations have not exceeded the 3 years of our CCC program, and we are afraid that if they do they will simply match.

Senator STEVENSON. Well, I have heard that, so I have gone out in the field myself to ask representatives of other countries, and representatives of this country, and I don't think that statement is accurate.

And what's more, I don't think that the Department of Agriculture would agree with it. I don't think that is right.

In any event, all we're suggesting is intermediate credit authority to meet the competition. And if it's not necessary, you would not have to use it.

Mr. MOORE. I personally would find that correct. The only opposition I would have to anything of that nature is, if we were taking the first step, if you are addressing it to matching competition, then I personally think that's right.

I would like to add one other point, Senator. You are quite right in terms of Exim not supporting intermediate credits for commodities, agricultural commodities. But we do have a definite function in cooperation with CCC to offer guarantees of insurance where it is needed in the short, up to 1 year, terms, and we do do a large volume of that.

Senator STEVENSON. Well, thank you.

Well, Mr. Chairman, it doesn't look like there is anything new in this export program with respect to CCC credits to support agriculture. And there's not really anything new for Exim that I can see.

Thank you.

The CHAIRMAN. Thank you very much, Mr. Moore.

[The statement follows:]

STATEMENT OF JOHN L. MOORE, JR., PRESIDENT AND CHAIRMAN, EXPORT-IMPORT BANK OF THE UNITED STATES

I. DEVELOPMENT OF OVERALL U.S. EXPORT POLICY

President Carter's statement on Tuesday, September 26, setting out the Administration's new initiatives on export policy was a key step forward in solving both our domestic and international economic problems. In the past five years, it has become increasingly obvious to the American public that the U.S. economy is integrally linked with the world economy. These links are, in many cases, of great benefit to us; but there are also areas where fundamental and severe problems have arisen. The basic question is: How can the United States play a constructive, international leadership role and, yet, simultaneously meet the needs of our own citizens?

It is fair to say that international economic policy management in the 1970's has proven much more difficult technically than our economists anticipated. The fluctuating exchange rate system alone has not solved our balance-of-payments difficulties, and we are now finding more and more evidence inside the United States of problems associated with the declining price of the dollar. It was with these vexing trends in mind that the "President's Export Policy Task Force" operated.

Given the complexity and interrelationship of the issues, we and the President concluded that no single action would make an adequate and acceptable change in our trade picture. The President, thus, announced that the Administration would take a three-fold approach toward export policy:

(A) Providing increased direct assistance to U.S. exporters;

(B) Reducing our own internal barriers to exports; and

(C) Reducing foreign barriers to our exports and designing a fair international trading system in which all countries could participate.

Although Eximbank will be a key factor in the program to increase direct support to U.S. exporters, we will not succeed in our efforts unless the other two parts of this integrated program are carried forward and achieve their objectives as well.

II. PAST ROLE OF EXIMBANK

Before analyzing the present and potential future policy decisions for Eximbank, it is worth mentioning briefly that Eximbank has served a broad variety of functions since its formation. In 1934, the Bank was set up with a prime intent of financing trade with the Soviet Union. In 1945, the Bank's charter and orientation were changed. During the post-war period of the "dollar short-

age," Eximbank financed exports predominanty to our wartime allies. During the 1950's and 1960's, the Bank financed to a broader range of countries; but its focus was still predominantly on exports to the wealthier countries. By the early 1970's, exports to the less developed countries had become an increasing part of the Bank's business.

However, there have been very fundamental differences in orientation between the Bank's successive managements. In the euphoria over the initiation of the fluctuating exchange rate system there was even discussion in some circles that government export finance was no longer essential. In the period between 1975 and 1977, for example, Eximbank reduced its annual financing level for direct credits from over $3 billion a year to approximately $700 million in 1977. Along with these fluctuations in expenditure levels, since the late 1950's, there has been a tendency for some to view Eximbank as a partial solution for U.S. short-term balance-of-payments problems.

This historical background affects our current policy because: (A) The sharp differences between successive Eximbank managements meant such changes in direction that many U.S. exporters and purchasing countries who wanted to use Eximbank finance were not sure of our stance; and (B) the focus on short-term concerns led to unfortunate ups and downs in Eximbank support when the Bank is really more suited for solving long-term project needs where private financing is not adequate.

III. PRESENT EXIMBANK POLICIES

Given the large variation in past Eximbank policy, it has been a central concern to me that we define a clear strategy for Eximbank and provide a predictable package of financial services. Private financing for U.S. exports is often not adequate when:

(1) Foreign government export credit agencies provide very low interest rates;
(2) The repayment terms for the project are longer than five to seven years; or
(3) The project itself is so large that the banks reach their own exposure limits for new commitments in a given country.

It is in these circumstances where Eximbank support could be critical to providing the necessary finance for U.S. exporters.

We, thus, devote considerable attention to monitoring the terms being offered by foreign government export credit agencies. Under the new International Agreement on Officially-Supported Export Credits, there is a set of procedures to exchange information on the interest rate, term, and percent of government credit in a given transaction. Given this information, we can tailor our financial support to meet that foreign competition. Similarly, we are in close touch with the Banks and know how much new credit they are willing to take on and can, therefore, make sure we are not crowding out private finance.

As the U.S. balance-of-payments problems have worsened, we have become significantly more expansive, but with a focus on financing bigger and longer-term projects that the private sector is not able to cover. I can now say with certainty that we have established an unambiguous and consistent strategy. Eximbank will be aggressive in meeting foreign competition, and we have the President's strong support for our continued expansion through fiscal year 1980. We have already taken steps that will make Eximbank financing both less costly and available in substantially greater volume.

The three best indicators of this are:

Our overall budget size;

The percentage of a project's financing which we are willing to support; and

The competitiveness of the interest rates and fees which we charge.

On the budget side, in the past 12 months, we have increased our direct credits from an annual rate of $700 million to $2.9 billion. We anticipate further substantial increases in our leading to a rate of at least $3.6 billion during fiscal year 1979. The President has now gone further and approved an expenditure level of $4.1 billion in 1980.

We have also significantly increased the percentage of a project which we will finance. During the first six months of 1977, Eximbank offered to finance 39 percent of the typical project; whereas this fiscal year, we have financed, on average over 65 percent of the projects which we were involved with. This increase in "cover" is particularly important because it means we will go into ventures where the private sector is not willing to provide sufficient financing and where U.S. exporters face aggressive competition from other nations' export financing agencies.

Our interest rates have also been trimmed to the barest minimums that we think are financially sound for an institution that must be self-sustaining. Thus, even during a period of rapidly rising interest rates, we have kept the cost of our loans at an average interest rate of 8.26 percent during this fiscal year. To do this, we have had to go below our normal interest rate scale in over 60 percent of our cases; and, in some circumstances, we have even chosen to lend below our marginal cost of funds. We have done this only because we consider it critical to make American goods available to foreign purchasers at competitive rates.

We have also substantially increased the flexibility of our program:

On June 27th, Eximbank's Board announced a major reduction in the fees for our financial guarantee program.

When necessary, we have used our existing resources together to match a mixed credit of another nation where that country was providing a combination of aid and commercial terms for what would otherwise have been a commercial project.

We have established lines of credit for more than $271 million to purchasers in Mexico and Brazil who outlined for us an ongoing set of financing needs which would require our involvement over a period of years.

In addition, we have made a number of administrative changes and reduced the costs of our insurance and guarantee programs to make dealing with Eximbank both less expensive and more expeditious.

Through these actions, we have made commitments to finance over $7 billion in potential projects; and we are now certain of funding about $3 billion of those commitments with actual authorizations.

IV. FUTURE EXIMBANK POLICY

The basic directions of our activity are now firmly established. The President's commitment to raise our direct credit authorization level by $500 million, from $3.6 billion to $4.1 billion, will allow us to fund both a broader range of projects and will have important balance-of-payments and employment effects.

With these additional resources available and the President's decision to reduce various internal barriers to our exports, the key determinants of our success will be in the responses of other nations.

Macro economic factors

At both the London and Bonn summit conferences, our major trading partners made clear commitments to increasing their economic growth rates. This is critical not only because it will increase our exports to the wealthy countries, but because the developing countries (which are Eximbank's major markets) grow more slowly when the wealthy countries are not expanding rapidly.

These growth linkages are especially significant because other wealthy countries like Britain and France have their own balance-of-payments problems and often find the need to aggressively support their own exports—usually in direct competition with us. To the extent that the entire developed world grew more quickly, we might, thus, see some easing of the intense export financing competition we now face.

Special factors

There are, as well, several other factors which will have a key effect on the demand for Eximbank financing and the success of our efforts to play a part in closing the balance-of-payments gap. The Multilateral Trade Negotiations (MTN) could have an extremely positive effect if there are major reductions in barriers to our exports and if other governments agree to substantial reductions in their present subsidies to their export industries.

The future Organization of Petroleum Exporting Countries (OPEC) decision on oil prices will also be of great importance, as a sharp rise in oil prices is likely to further aggravate world inflationary pressures and reduce the willingness of Germany and Japan to expand their growth rates.

In addition, we will need to be extremely careful in monitoring how our major trading competitors proceed with their export financing programs. As we have shown in our recent "Report to the U.S. Congress on Export Credit Competition and the Export-Import Bank of the United States"[1] both the Japanese and French still have considerably more flexibility in the programs that they offer

[1] Eximbank's latest competitiveness report of July 1978 was made available to all offices in the Capitol, but additional copies are available here today and on request in the future.

on export credit, and we will need to be persistent in making sure that they do not further expand the already intense competition in this area.

V. CONCLUSION

The President's recent decision has set the framework for a comprehensive U.S. export policy. By decreasing the domestic regulations which limit exports and by increasing the Eximbank authorization limit by an additional $500 million in fiscal year 1980, the President has demonstrated to the world that we are taking our balance-of-payments problems seriously. In the last year at Eximbank, not only have we increased the size of our programs, but we have established a new set of policies that will make it cheaper and less cumbersome for U.S. exporters to use our services.

The basis has, thus, been laid for dealing with a critical part of the U.S. balance-of-payments problem. The response of our major trading partners and our general success of handling our macro-economic policy will, however, shape the final results.

EXIMBANK AND FCIA ANNOUNCE NEW PLAN TO SUPPORT AGRICULTURAL COMMODITIES

September 26, 1978

The Export-Import Bank of the United States (Eximbank) and the Foreign Credit Insurance Association (FCIA) have announced a new insurance feature to facilitate increased commercial bank financing of bulk agricultural commodity exports. American farmers and agribusinesses will find commercial banks financing for their agricultural commodity exports more readily available as a result of this initiative.

John L. Moore, Jr., President and Chairman of the Export-Import Bank, said, "This special coverage will enable U.S. banks to finance many sales which could not otherwise be assisted. It should provide substantial benefits to American farmers. This new initiative by Eximbank is part of the administration's effort to further U.S. exports.

Robert A. Keenan, President of FCIA, stated, "The special bulk agricultural commodity coverage was developed in response to requests from the commercial banking community. It is expected that food grains will be among the first commodities to be covered with this feature. This is the latest in a series of program changes which FCIA and Eximbank have approved over the past few months, in an effort to respond to the export financing needs of the business and banking communities."

Under the new feature introduced today short-term commercial and political risk insurance coverage will be available to U.S. commercial banks to support exports of bulk agricultural commodities sold on irrevocable letters of credit issued by foreign banks with repayment terms not exceeding 360 days. Insurance coverage may now be obtained on these individual transactions, whereas the banks had previously been required to obtain coverage for all eligible short-term export transactions financed during the policy period. A new fee rate has been established for this cover.

To permit FCIA to respond promptly to U.S. banks' requests for this special coverage, FCIA and Eximbank will prequalify numerous foreign banks that may issue the irrevocable letters of credit.

Moore noted that the Bank is currently developing another program, in cooperation with the U.S. Department of Agriculture's Commodity Credit Corporation, which is aimed at increasing export sales of U.S. agricultural commodities through the financing of storage and other agricultural facilities overseas.

Other program changes recently announced include:

Simplified fee schedules for Eximbank commercial bank guarantees and FCIA insurance were adopted. Fees now vary with the term of the credit and type of borrower, rather than the country of the purchaser.

The bank guarantee program was revised to make that program more attractive to commercial banks. The dollar limit on the amount of the guarantee fee that banks can retain has been removed, and the percentage of fee retained is now related to the amount of risk assumed.

A new Eximbank guarantee program was introduced to provide protection for U.S. contractors working on foreign projects. The U.S. Contractor's Guarantee Program provides protection against losses due to currency inconvertibility, war, or confiscation of the contractor's tangible property

and bank accounts. It also protects the contractor in certain other contract disputes.

Eximbank modified its bank guarantee program to offer increased risk protection to small exporters, and Eximbank and FCIA developed a new small business insurance policy which provides increased protection against the risks of export credit.

Eximbank strengthened its Cooperative Financing Facility. Under the CFF, Eximbank provides medium-term credit lines to be used with funds provided by foreign financial institutions to finance purchases from the United States. Eximbank removed the limit on the amount which the foreign bank may mark up the funds borrowed from Eximbank and relent to its customer. In addition, Eximbank no longer applies a dollar ceiling to CFF transactions, nor does it limit the total support to any single buyer.

Eximbank and the Foreign Credit Insurance Association have introduced a new program called "Switch Cover" to facilitate sales of certain categories of U.S. capital equipment normally sold through foreign distributors.

Eximbank adopted a reduced fee structure for its Financial Guarantee Programs which guaranties repayment of substantial portions of export financing provided by private financing institutions.

The Export-Import Bank of the United States is a financially self-sustaining U.S. Government Agency which assists in financing the export sale of American goods and services. It receives no budget appropriations. Since its inception in 1934, the Bank has earned almost $3.0 billion in net profits and has paid dividends totalling nearly $1 billion to the U.S. Treasury.

FCIA is an association of 50 leading private U.S. marine, property and casualty insurance companies. Established in 1961, it assists in the sale of U.S. exports by providing export credit insurance in cooperation with Eximbank. Export credit insurance protects exporters of U.S. goods and services against non-payment of foreign buyers for commercial and political reasons.

Mr. NORDHAUS. Mr. Chairman, may I submit my statement for the record?

The CHAIRMAN. Yes, Mr. Nordhaus, we will make your statement a part of the record in full.

I'm sorry. We wanted to really examine you after we had the opportunity to hear from this next group. But I understand your time problems and we're very appreciative of your being here.

[The statement follows:]

STATEMENT OF WILLIAM D. NORDHAUS, COUNCIL OF ECONOMIC ADVISERS, EXECUTIVE OFFICE OF THE PRESIDENT

Mr. Chairman, I am very pleased to have the opportunity to appear here today with my colleagues to discuss with you the President's Export Policy Report. I would like to first discuss the nature and extent of our balance of trade problem. I will then address factors that are working to correct our imbalance, and the role of the Administration's Export Policy in this process.

PATTERNS OF TRADE IN 1977 AND 1978

The size of our trade deficit during 1977 and 1978 has attracted growing attention over the year, both in the financial and popular press. The attention is understandable given that the size of the deficit was unprecedented. The largest previous trade deficit for a full year was the $9 billion recorded in 1976. In 1977 it grew to over $31 billion and for the first two quarters of 1978 it has run at an annual rate of $38 billion.

Oil has contributed approximately one-fourth of the almost $30 billion decline in our trade balance from 1976 to the first half of 1978. The major other factor has been the poor performance of our nonagricultural exports. A good deal of the export sag was due to the weakness in the economies of our major trading partners, while some can be attributed to loss of price competitiveness to early 1977.

It is important to emphasize that our trade account constitutes only a part of the totality of the U.S. international transactions. It omits services—such as computing, banking, and financial services, the fees and royalties on American technology and patents, as well as travel, transportation, and income from foreign investment. It is noteworthy that the service part of the current account has gone

from a $6 billion surplus in 1973 to over a $15 billion annual surplus in the first half of 1978. In the international as well as the domestic economy, we are becoming a service economy.

SOLUTIONS TO OUR TRADE DEFICIT

Thus, our unprecedented trade deficit over the past two years has been both an import and an export problem. There are many factors working toward a correction of these fundamentals, several of which are beginning to take effect and all of which will become increasingly effective in the coming months.

(*a*) Our efforts to work with our major industrial trading partners to help them achieve faster real growth rates. At the Bonn Summit in July, both Germany and Japan agreed to take specific steps in this direction. I am happy to report that they have both followed up with specific policies and policy proposals to implement their Summit commitments.

(*b*) The Administration's efforts in coordination with the Congress to produce energy legislation that will enable us to reduce our petroleum imports. The Natural Gas Bill is a first step in this direction, but much more needs to be accomplished before we can be confident of turning the corner on our unacceptably large oil imports.

(*c*) Our ongoing work in Geneva on the Multilateral Trade Negotiations. Early next year, the Administration will bring to the Congress a comprehensive legislative package that will be the result of long and intensive negotiations. These have been aimed at breaking down both tariff and (perhaps more importantly) nontariff barriers to the expansion of international trade. This package is an important part of our fundamental commitment to free trade. We must always be ready to take a leadership role in supporting free trade and blocking the advancement of protectionist pressures. Protectionism abroad reduces the scope for further expansion of our export opportunities.

(d) The depreciation of the dollar, which on a trade-weighted basis have been between 6 and 16 percent (depending on the types of weights used) since December 1976. Such depreciations could eventually lead to an improvement in our current account by $8 to $25 billion compared to what would have otherwise occurred.

THE PRESIDENT'S EXPORT POLICY

On Tuesday, the President announced a package of measures designed to enhance our export performance. This package addresses a fundamental problem—U.S. firms have failed to take advantage of opportunities in foreign markets. Over the next few years, we would like to improve our export performance. There are good reasons to think that a better export performance is in the making: exports are made more profitable by recent dollar depreciations, will be made more accessible by likely MTN agreements, and will be more visible as a result of the effects of the Administration's commitment to increased exporting as a national goal.

The existence of limited export horizons has especially been a problem for small firms. We are confident that the $100 million Small Business Administration loan guarantee program under this Export Policy will be an important factor in tapping this reservoir of export potential.

Another potentially important part of the program is the redirection of $20 million into both the Commerce and State Department export development programs. These funds should prove to be an effective means of reaching and helping a large number of potential exporters.

The increased Export-Import Bank flexibility in landing, and roughly 15 percent increase in their direct landing level, should enable the Exim Bank to offer services that are more competitive with similar institutions existing in our major trading partners.

Perhaps the most potentially significant set of policies in the package are those that are aimed at reducing government-imposed restraints that reduce our international competitiveness. These restraints typically exist because of other central national goals. It is critical that we weigh our exports along with other goals in making legislative and regulatory decisions. We propose to reduce the government-imposed barriers to reaching export markets, while not ignoring other valid national concerns.

In this vein, the Administration will now assess the impact on export activity of all major administrative and regulatory actions. In addition, when agencies are considering the use of export controls for foreign policy purposes, careful attention should be given to the export consequences. In addition, the Attorney General will soon be clarifying the Foreign Corrupt Practices Act and our review

procedures on international antitrust issues. Many business persons feel that it is precisely these government regulations and a lack of precision in their administration that are the major impediment to export expansions. This Administration is now committed to reducing these barriers as a major step in reducing our balance of trade problems.

R. & D. COMPETITIVENESS, AND THE TRADE BALANCE

Before concluding, I would like to respond to an additional question—What is the significance of declining rates of research and development on U.S. competitiveness?

We know that a strong connection exists between technological advance and economic growth. We also know that it is impossible for the private sector to either appropriate all the benefits that accrue to society from inventions and technological advances or to be fully compensated in the private market for the risks of an individual project. In light of our knowledge of the relationship between technological advance and economic growth, I feel there is a connection among the dramatic decline in the national research effort and the significant decline in the national research effort and the significant reduction in U.S. productivity growth, appearance of new products and U.S. competitiveness.

Last January, the President announced steps to revitalize the Federal R&D effort. In addition, there is a major interagency study into the decline of industrial innovation. Out of these two efforts, I hope the Nation can regain its earlier technological progressiveness.

In summary, I would like to reemphasize the Administration's belief that a better export performance by the United States would be very beneficial. It would contribute to an expansion of domestic output and employment, lead to a stronger dollar, and improve prospects for reducing the budget deficit while maintaining economic growth. In conjunction with the depreciation of the dollar, anticipated stronger growth prospects among our major trading partners, positive results from our negotiations at the MTN, and the passage of the Administration's energy legislation, I am confident that the President's new Export Policy will contribute significantly to reducing recent imbalances of trade and payments.

TABLE 1.—U.S. MERCHANDISE TRADE AND CURRENT ACCOUNT

[Current dollars in billions]

	1973	1974	1975	1976	1977	1978 (1st half)[2]
Merchandise exports	71.4	98.3	107.1	114.7	120.6	131.7
Agricultural	18.0	22.4	22.2	23.4	24.4	29.0
Nonagricultural	53.4	75.9	84.8	91.3	96.2	102.7
Merchandise imports	70.5	103.6	98.0	123.9	151.7	169.8
Petroleum	8.4	26.6	27.0	34.6	45.0	41.5
Nonpetroleum	62.1	77.1	71.0	89.3	106.7	128.3
Trade balance	.9	−5.3	9.0	−9.2	−31.1	−38.1
Military transactions, net	−2.3	−2.1	−.9	.3	1.3	1.5
Net investment income	12.0	15.5	12.8	15.9	17.5	17.9
Net travel and transportation	−3.1	−3.1	−2.5	−2.1	−3.0	(1.8)
Other services, net	3.3	3.9	4.6	4.4	4.8	
Unilateral transfers, net	−3.9	−7.2	−4.6	−5.0	−4.7	−5.3
Current account balance	6.9	1.7	18.4	4.3	−15.2	−22.2

[1] Balance of payments basis.
[2] 1st half seasonally adjusted annual rates.

Sources: Department of Commerce, Bureau of Economic Analysis.

TABLE 2.—U.S. MERCHANDISE TRADE VOLUME

[1973 = 100]

	1973	1974	1975	1976	1977	1978 (1st half)
Agricultural exports	100	91.4	93.3	103.8	106.7	126.2
Nonagricultural exports	100	114.2	110.1	111.6	111.3	111.8
Oil imports	100	95.8	94.1	113.3	135.9	125.0
Nonoil imports	100	97.4	81.1	101.2	111.7	123.8

Source: Derived from Department of Commerce

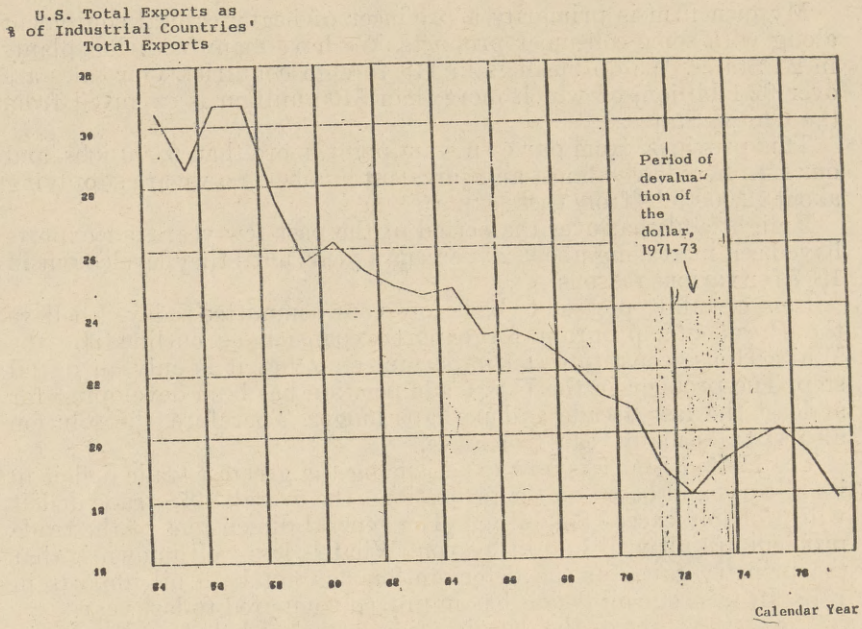

FIGURE 1.—U.S. share of industrial countries total exports

Source: Institutional Monetary Fund.

Mr. CHAIRMAN. We will now hear from Mr. William Wearly, chairman and chief executive officer, Ingersoll-Rand Co., and chairman of the International Economic Affairs Committee of the NAM, accompanied by Mr. Lawrence Fox, vice president for international affairs of NAM.

STATEMENT OF WILLIAM L. WEARLY, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, INGERSOLL-RAND CO., AND CHAIRMAN, INTERNATIONAL ECONOMIC AFFAIRS COMMITTEE, NATIONAL ASSOCIATION OF MANUFACTURERS; ACCOMPANIED BY LAWRENCE A. FOX, VICE PRESIDENT FOR INTERNATIONAL AFFAIRS, NAM; AND JACK BABSON, CORPORATE VICE PRESIDENT, INGERSOLL-RAND CO.

Mr. WEARLY. Mr. Chairman, Senator Stevenson, members of the committee:

I am William L. Wearly, chairman and chief executive officer of Ingersoll-Rand Co. With me on my right is Lawrence A. Fox, NAM's vice president; and on my left is Jack Babson, corporate vice president of my company. I'm appearing as chairman of NAM's Economic Affairs Committee, which, as you know, is composed of some 13,000 business firms, both small and large, located in every State of the Nation. NAM's members account for about 75 percent of America's industrial output and provide about the same percentage of the Nation's industrial jobs.

My own firm is primarily a producer of heavy capital equipment along with some consumer products. We have manufacturing plants in 24 States. We do business in 119 foreign countries. Our sales are over $2.1 billion, of which more than $400 million is exported from the United States.

This provides, from our own standpoint, more than 6,000 jobs, and our suppliers have almost an equivalent number. So we are supplying about 12,000 jobs from these exports.

I might add that over the period of the past few years our exports have been increasing about 20 percent a year, until they leveled out in 1977 for various reasons.

I am certainly pleased to be before your committee today. I believe the President's program for export expansion as outlined by the White House constitutes an important step, but it is only an initial step. The problem in the U.S. trade position has been developing for at least the last decade and perhaps longer. Therefore, the solution also will take many years to achieve.

The United States is now experiencing the greatest trade deficit in its history, and based on the projections, the overall 1978 trade deficit will probably exceed $30 billion. The general dimensions of the trade problem are all well known by you. What is less well known is that the primary cause of the deterioration has not been oil imports in 1978. In fact, our oil deficit has improved compared to last year.

The main source of the deterioration in the trade balance is now in the manufactured goods sector. The United States is essentially a manufactures exporter. Manufactured goods provide two-thirds of our total export earnings. It is not difficult to grasp the tremendous change which has taken place in our international competitive position for manufactured goods in the past few years.

In 1975 we had a trade surplus of roughly $20 billion in manufactured goods. In 1978 we will have a trade deficit of roughly $10 to $12 billion in this area, a negative swing of over $30 billion in only 3 years.

To illustrate the seriousness of the situation, bear in mind that the United Kingdom in 1977 had a trade surplus in manufactures of roughly $10 billion. The United Kingdom, an economy roughly less than one-eighth the size of the United States, and one whose industry has experienced great competitive and inflationary problems, is used for illustrative purposes only to demonstrate the seriousness of our own problem.

Some will argue that exchange rate developments, further devaluation of the dollar or revaluation of the yen and the mark, will rectify the U.S. trade problems. Others may contend that it is mainly due to the business cycle, and because the United States has grown more rapidly than Japan or Western Europe during the past few years, it is importing more and exporting less than other countries in response to this business cycle situation.

I don't think you expect me to delineate this problem beyond the statement of these viewpoints. You have other witnesses for this purpose. I would state, however, that reliance on exchange rate developments or business cycle changes to correct the American trade position and improve the U.S. balance of payments position more generally represents a theoretical view widely held by many economists, but shared virtually by no businessmen.

Much of the responsibility for this poor performance of U.S. exports must fall on government, both the United States and foreign governments, for their increasingly interventionist role in international business transactions. The U.S. Government for its part recently has been succeeding more in discouraging rather than promoting increased exports. While this result probably is due more to inadvertence than to design, it reflects the relatively low priority that export expansion has had in the listing of national policy goals. Thus the absence of effective export stimulants, the continued growth of bureaucratic redtape, and the often counterproductive use of presumed export leverage to pursue noneconomic policy objectives have all served to place a series of self-imposed restraints on U.S. exports.

And might I add that it seems we have a perverse leverage, not recognizing whether we are buying or selling. It makes a big difference, since buyers have leverage and sellers don't. The ability of American exports to compete effectively in foreign markets also has been seriously impaired by the interventionist industrial policies of foreign governments, designed to foster their own industries and create additional employment, as well as to earn foreign exchange to correct their own trade account problems. Most major projects—for example, those requiring financing in the $2 to $3 billion range—can hardly take place anywhere in the world without official government support one way or another, with the exception of projects within the U.S. economy at home.

In providing financing and other support for such major projects, governments have, to a greater degree than is commonly understood, adopted neomercantilist policies, by which they hope to limit imports, satisfy internal markets, and create the necessary productive capacity to generate an export surplus to earn foreign exchange. Such interventions distort international market forces and are just as responsible for the current problems of the dollar as the so-called lack of competitiveness of U.S. manufacturers.

I must also note that American industry is not as competitive today as it was some years ago, because of insufficient new investment. Our society is consumption oriented, which is another way of saying that in terms of tax or other incentive policies, we are oriented negatively with respect to promoting new productive investment.

What has to be done in the longer run is to create a climate in the United States which makes American industry investment-oriented in relation to new plants and, even more importantly, in relation to research and development. Because of the declining profit margins of U.S. industry, not enough money has been available for research and development in recent years.

A bit later in my testimony I will provide examples or answer questions which illustrate several major industrial projects involving heavy R. & D. commitment in the United States and abroad which my company is not undertaking or is not likely to undertake, simply because industrial profits are relatively too low and the economic conditions at home and abroad are too uncertain, due to increased Government intervention. Simply stated, we don't have the money to accept risks whose Government-inspired dimensions we cannot assess in today's uncertain domestic and international business climate.

I will turn now to specifics of the President's export expansion program, which I would like to emphasize again I commend and generally support as an initial effort. I will indicate areas in which I believe the program can be improved further both in the short run and in the long run, and will cite contradictions, as in the elimination of the DISC.

Personally, I believe we need two export expansion programs, one for today and one addressed to the longer-range problems facing our economy and the difficulties of further opening foreign markets to American goods.

I believe that the President has recognized in his program that the American trade balance problems have been building up for some years. Therefore, it is not surprising that it should take a number of years to solve some of the more fundamental, underlying problems respecting American industrial competitiveness. We need a longer-term commitment to controlling inflation, to industrial growth, and to export expansion if we are to succeed in maintaining and improving the American standard of living.

In the context of international trade and the value of the dollar, there is nothing we can do that would be more valuable than to adopt a national strategy to improve our export performance for today and tomorrow and for the rest of the 20th century.

The President's export expansion program was only available to us 1 day prior to this morning's hearings. In fairness to all concerned, a detailed evaluation of each of these proposals should be undertaken only after the careful and thoughtful study that hearings such as this one can promote. Therefore, with the committee's permission, I would prefer to comment upon the administration's proposals as they relate or do not relate to what we feel are the necessary ingredients of any effective export expansion effort.

In particular, I would like to cover eight areas:

One, export expansion priority;
Two, taxation;
Three, export credit;
Four, regulations affecting U.S. exports;
Five, the multilateral trade negotiations;
Six, antitrust;
Seven, small business exports; and
Eight, the Export Council.

EXPORT EXPANSION PRIORITY

NAM endorses the President's strong statement that U.S. priorities must be changed to accord a high priority to export expansion objectives. The success of this effort, of course, will depend on a continued firm policy commitment and practical implementation steps. This national export policy statement and increased funding of export development activities should provide some shortrun benefits.

However, a more extensive and fundamental examination also should be made of the full executive branch organizational structure pertaining to both the formulation and implementation of international economic policy. This topic is one of the areas reportedly being studied by the President's reorganization project team examining economic policymaking. We hope that their recommendations will soon be completed and made available for public comment.

A broader executive branch reorganization should serve two complimentary purposes: First, it should seek to guarantee that export

promotion and other international economic objectives have a strong policy advocate in top Government councils. Second, export promotion and other commercial assistance programs should be consolidated into a more integrated and more easily used structure.

Since the beginning of this year we have had a special task force of NAM's International Economic Affairs Committee examining a bill, S. 1990, introduced by Senators Abraham Ribicoff and William Roth, which I understand is cosponsored by Senators Daniel Inouye and Donald Riegle of this committee, to create a Cabinet-level Department in International Trade and Investment.

If certain modifications were made in this proposal, particularly the incorporation of an interagency coordinating mechanism, it would have much to commend it. For the first time, there would be a Cabinet-level officer of the Government, backed by full departmental staff resources, whose primary policy mission would be to look after U.S. competitiveness in the international marketplace.

Additionally, the consolidation of trade and investment activities into one department would provide a more integrated and understandable structure for business to work with on export expansion activities.

I personally strongly favor the adoption of a modified version of this bill, S. 1990, to create such a new Department of International Trade and Investment.

TAXATION

The President is continuing to urge a phaseout of DISC's, although he indicates a willingness to work toward some alternative, less costly, and more effective formulation. The NAM feels that this position is clearly disadvantageous to U.S. exporters and is unwarranted in view of the positive contributions that DISC has provided to the national economy through its promotion of American exports. In the face of a mounting trade deficit and ever-increasing efforts by foreign governments to actively spur their exports, it is imperative that the United States not abandon a proven incentive for export growth.

Indeed, it seems strangely ironic that in commenting upon a new export expansion program, we must engage in the defense of one of the few mechanisms of export expansion available to U.S. business. In fact, I believe that it has been the equivocating position, the uncertainty of the U.S. Government toward the DISC program, which has discouraged many corporations, particularly smaller business firms, from building an export strategy utilizing DISC's, for fear the program could face imprudent elimination at any moment.

You know, sometimes I believe the mechanism for exporting may not be clearly understood by many of us. We have all heard the old adage, you can't sell out of an empty wagon. And the DISC is one of the great things for providing the goods in the wagon.

Let me just for a moment tell you about our own company's business. Of the $400 million in exports that we did last year, we required about 25 percent more receivables and inventory than for handling domestic business. In our case, then, for those exports we required about $70 to $80 million tied up in addition to what it would take to do business in this country.

Now our own DISC benefit since the inception of DISC is $22 million. That means that of that $70 to $80 million we need in the wagon to do business abroad, DISC helped us with about $22 million of it.

If DISC is eliminated and we have to give that back, where does it come from? It isn't lying there in a barrel. We have to go out and curtail our foreign inventories and foreign receivables and, in effect, shrink the export program.

In the long run, there are very important and fundamental tax issues before us, especially regarding capital formation, which will serve both domestic and international economic objectives. Issues such as the investment tax credit, more rapid depreciation, and reduction of the corporate income tax are essential.

However, for the present no other tax instrument can enhance our export capacity as directly as the DISC. And it would be counterproductive to the objective of bolstering U.S. exports if we were to dispense with it now.

One other important taxation issue concerns the treatment of U.S. workers stationed overseas. Prompt and favorable resolution on this issue should be a part of the formulation of any overall U.S. export policy. As long as the cost of maintaining U.S personnel overseas is made prohibitive by self-imposed costs, the goods that those personnel market, construct, or service are made correspondingly less competitive with the goods of foreign companies.

Over the short run, NAM favors the adoption of section 911 language along the lines of a bill, H.R. 13488, passed earlier this week by the House of Representatives. We do not consider the administration's original proposals regarding the revision of section 911 provisions as an adequate solution to the problems, and therefore I recommend administration support for changes along the lines of the House-passed bill.

Finally, longer range tax measures should be considered. The value-added tax, for instance, is now widely used throughout Western Europe. Comparable indirect taxes are used in Canada, Japan, and many other countries. The effect of the value-added tax, of course, is not only export stimulative and import-dampening, but perhaps most important of all, it tends to stimulate investment.

While NAM has no policy position on the value-added tax, it is an example of the type of major long-range issues which need serious study.

EXPORT CREDIT

The President's export expansion program properly calls for a strengthened and more competitive Export-Import Bank. The NAM has for many years urged that the Eximbank's financial resources be expanded and its flexibility enhanced. Over the short term, we would urge Exim to adopt as aggressive a posture as its mandate will permit. In particular, it must be as flexible as possible when going head-to-head with the export credit facilities of our major trading competitors.

We support the President's directive concerning further efforts to negotiate an international accord placing some limitations on governments' international export credit practices; but believe that such efforts must be comprehensive and not simply limit certain devices, like interest rates, terms of years, and so forth.

In any case, Exim should be made fully competitive with credit facilities provided by foreign competitor countries, as required by the Exim statute.

Also central to a more competitive Eximbank is the elimination or modification of a series of statutory provisions which increasingly mire

Exim down in issues extraneous and counterproductive to its primary mandate. These requirements, which cover such issues as human rights and invironmental reporting, are with greater frequency inhibiting the Exim from making timely and competitive responses to the financing needs of U.S. exporters.

REGULATIONS AFFECTING U.S. EXPORTS

I would like to discuss these and other such self-imposed export restraints under the general heading of regulations on U.S. exports. The recent proliferation of regulations on U.S. exports is one of the most serious and certainly the most frustrating of the self-imposed constraints on our exports. And I would like to add, we spend a lot of money developing these restraints. If we saved that money, it would help in the incentives that we are asking for.

NAM fully supports the President's directive that the export consequences must be considered in regard to domestic regulations and his effort to place some limits on the use of export controls for foreign policy purposes. Let us address in slightly more detail just three of the regulations which are directly pertinent to aspects of the President's export expansion program: Environmental restrictions, foreign policy considerations, and antiboycott regulations.

One recent entrant to the center stage of U.S. national export policy is a concern with the environmental issues first addressed on the domestic level. The President's recent Executive order precludes mandatory application of environmental regulations in foreign situations and places some other constraints on this area, but leaves a number of troubling questions concerning the use of an abbreviated environmental review procedure.

We would urge that Exim be specifically exempted along with Commerce and Treasury Department licensing procedures from the application of environmental regulations affecting foreign countries' sovereign territories. Any serious improvements in global environmental controls must come through a cooperative multilateral approach, where we all operate by the same rules and guidelines. Otherwise we will find our Export-Import Bank and other U.S. agencies further incapacitated in their efforts to help expand U.S. exports.

The President has indicated in his export policy proposals that export controls must not be used indiscriminately as a tool of foreign policy. We support the President's recognition of the need to consider export consequences and also the availability of third-country sources.

Nevertheless, we urge that one additional step be considered along the lines of a Presidential statement that all normal diplomatic or political tools be utilized before resorting to economic leverage to the disadvantage of U.S. suppliers.

A current example of a complex issue involving foreign policy and other national interests is the United States response to international boycotts, most specifically relevant to the Arab boycott of Israel. However, we believe that this example also illustrates how the regulations can be made unnecessarily complex and restrictive beyond meeting legitimate national policy obectives.

We would offer a logical answer to the administration's professed desires for resolving admitted conflicts between Treasury and Commerce Department antiboycott regulations—recommend to Congress

the repeal of the Tax Reform Act provisions. If Congress would take such action, the statement of national export control policy and the implementing regulations regarding international boycotts would rest in one appropriate place.

Although the Commerce Department's antiboycott regulations are themselves exceedingly and at times unncessarily complex and burdensome, they are at least the appropriate regulatory mechanism for addressing this important policy issue.

MULTILATERAL TRADE NEGOTIATIONS

The MTN, now drawing to a close in Geneva, offers the best avenue for expanding U.S. exports within the context of growing world trade. These negotiations will set the framework of global trading regulations well into the eighties, thereby influencing the potential success of any U.S. export expansion effort.

Rising Government intervention in the marketplace, featuring increased use of both overt and indirect export subsidies, as well as other distortions to trade, has placed a heavy burden on the negotiators. A continued liberalization of world trade requires in particular substantial progress in restraining the use of nontariff measures to distort or restrain trade.

Several multilateral codes currently are being negotiated on the most important nontariff measures, including subsidies, Government procurement standards, customs valuation, and an international safeguard mechanism. In general the United States must press for a conclusion of the MTN which will set significant and substantial constraints on governmental intervention in the marketplace.

In the kind of neomercantilist world we unfortunately see emerging, all of the tools available to Government will be used vigorously in the long run. The achievement of a freer and fairer framework for world trade growth will be equally important with the steps taken here at home to promote the priority objective of national export expansion.

ANTITRUST

The administration's export expansion program calls for expediting Justice Department antitrust review procedures and other clarification actions to help dispel business community concerns over application of antitrust regulations in export-related areas. NAM supports this proposal and recommends that the administration take an additional step to expand Webb-Pomerene Associations to include the service industry.

SMALL BUSINESS EXPORTS

The administration's export expansion program includes several items directed toward increasing small business exports. Currently only about 8 percent of the Nation's manufacturing firms are involved in exporting to overseas markets, and NAM concurs that an effort to increase this number is essential.

It is only realistic to concede that the majority of export sales will still come from large international U.S. companies whose overseas operations and established sales networks stimulate a demand for U.S. export items. However, numerous small- and medium-sized firms have

succeeded in the international marketplace, and many more participate in the export economy through a supplier relationship with larger corporations that maintain pull-through export operations overseas.

Again, if I might mention my company, of our over $400 million of exports, $38 million came from small business, our suppliers. For example, of the 6,100 U.S. suppliers we have, again, half of those would be small businesses.

There is good potential for other small businessmen to join the ranks of direct exporters or exporter suppliers, if provided with proper encouragement and adequate support.

NAM supports the retargeting of some SBA funds for exporter assistance, but points out the limited nature of this action.

But over the longer run, the most effective encouragement for small business exporting expansion would come from Federal Government efforts to: One, back its verbal commitment to priority treatment for export expansion with reinforcing programmatic actions, starting with a firm commitment to retention of the DISC program, which would give small business the confidence to make sales based on the program's use—and, I might say, on an assured, ongoing basis.

Two: Reduce processing redtape and delays, particularly with boycott regulations, export licensing and administrative reviews of export transactions for noneconomic reasons.

And, three, a general consolidation of the scattered and diverse Government offices involved in export promotion or assistance, perhaps into one department better able to provide integrated and constructive assistance to U.S. companies in the international markets.

EXPORT COUNCIL

The administration is proposing to establish a restructured Export Council, to include Members of Congress, the business community, and labor. NAM supports this proposed expansion of the Council to demonstrate the broad-based national commitment to and support for a priority national export expansion program. We would urge, however, that the Council's full potential be exploited rather than, as has occurred at times in the past, relegating the Export Council to the role of a figurehead organization.

In particular, the Council's mandate should encompass authority to establish goals and monitoring procedures to assure that export expansion objectives are achieved in an effective and timely fashion; and undertake substantive exporation of basic, longer run issues, such as taxation techniques for dealing with State trading corporations, or other serious export-related questions which require a thorough examination in light of long-term national export objectives.

I conclude by saying the President's announcement of a new national priority for export expansion objectives is both appropriate and timely. Improved export performance is essential to help correct the country's record trade imbalance, strengthen the dollar, and contribute to further productive economic growth.

NAM believes that all segments of the American economy should work together toward the national export expansion goals outlined in the President's statement. However, we would caution that prompt followup actions by the administration are necessary to eliminate

contradictions in the program, particularly the inadvisable phaseout of the DISC program, and to carry out effectively other program elements.

There must be a forceful demonstration in practical terms that the announced altered priorities are in fact being translated into concrete measures of reduced regulatory restrictions and the achievement of real constraints on the various forms of Government intervention under negotiation in the Geneva trade talks.

Finally, attention must be paid to the longer term fundamental problems of U.S. capital formation needs and increased productivity. NAM will be offering more detailed comments and suggestions regarding both the short- and long-range aspects of this multifaceted program. The successful pursuit of a substantive export expansion program is an integral part of the economic policy objectives this Nation must set to maintain a healthy domestic economy and retain a competitive international economic position.

Mr. Chairman, I have summarized my statement. I request that the full statement be made part of the record. Thank you.

The CHAIRMAN. Thank you, Mr. Wearly, for a very fine statement. Your entire statement will be made a part of the record.

As a representative of the private sector, what additional programs would you like to see to get at this very serious problem?

Mr. WEARLY. Just answering off the top of my head, I think if we could establish assuredness of an ongoing stability, that would be one of the greatest things that could happen. Now, that is hard to do that because priorities change. But the world perceives us as unreliable, as unpredictable, and predictability on a good program is the thing that we need.

Right now, we are in the euphoria of trying to build this up, and the world wonders what will we be doing 2 years from now. So I say to you, that would be one of the strongest things.

The CHAIRMAN. We heard from Mr. Frank Weil this morning. He pointed out that there had been four previous efforts on the same subject over the years, but none of them has been very successful. I would certainly hope that this one has more success than those four efforts and that we can achieve some stability.

I think you made a very important statement in your remarks indicating that all segments of the American economy should work together, and that we do have a unified objective, and the outlines for achieving those objectives. I think that would make that possible.

The most recent trade figures for August show a significant improvement over July. Do you believe that this shows the correctness of the currency devaluation theory as a solution to our trade problem?

Mr. WEARLY. I'm always a little bit suspicious of 1 month's figures. I doubt if it reflects anything very substantive in the overall picture.

I might ask my colleague Mr. Fox if he wants to comment.

Mr. FOX. I believe an examination of the data would show that most of the improvement is due to Alaskan oil and to export sales of aircraft.

I simply do not agree with Mr. Bergsten's statement that we are gaining in competitiveness in various sectors, as we are losing competitiveness in others.

NAM recently did a report dated May 18, entitled "U.S. Trade Performance Since 1970," with special reference to manufactured goods. I would request, Mr. Chairman, that this report be made part of the record.[1] Specifically, I would refer to table 15 on page 32 of that report, which shows in each of the major manufacturing goods areas, the so-called SITC, the standard international trade classification categories 5 through 8, we have in fact in the period 1970 through 1976, as a whole, lost competitiveness in every single area.

Now, there will be some changes in the future. I think there will be some improvement in export sales of aircraft, for instance. But I doubt if we will regain the market share we had at an earlier period.

The CHAIRMAN. Of course, at an earlier period we had the entire market share for aircraft. But now that has changed, and we have got to anticipate that it will change in the foreseeable future.

But we certainly do have the opportunity to increase our market share over what it has been at the low point.

Mr. FOX. The purpose of my comment, Mr. Chairman, is to provide data for the record, and we have that report here, as well as for that 7-year period, including an update for 6 months. It simply contrasts with the optimism supplied by administration witnesses, and particularly Mr. Bergsten.

I also call your attention to table 16 of that report, which makes a comparison in detail, category by category, and makes, in a separate portion of the report, comparisons with the export performance of Japan and Germany.

I think the macroapproach to this problem fails to illuminate the actual deterioration that is taking place in market shares in the most important sectors affecting our export position; namely, in capital goods and high-technology systems generally.

The CHAIRMAN. Mr. Wearly, are the funding provisions of the export program adequate or should additional funds be made available?

Mr. WEARLY. I commented earlier that I believe we could save a lot of money if we used the expense that is now being used to hinder our exports and funneled that over into the other area. I can't give a quantitative number of what is required, but I can assure you that if we give the appearance of thinking exports are good and of showing America to be a reliable supplier, I think the amount of money is probably adequate.

The CHAIRMAN. Does the antitrust policy contained in the President's statement address the concerns of the business community?

Mr. WEARLY. I don't believe it does.

The CHAIRMAN. Why not?

Mr. WEARLY. I'm not a lawyer. It is nice to use good words, but I don't know whether the Justice Department thinks what the President is thinking, and we are frankly pretty scared of the Justice Department. And I would say that many of the big consortia projects that are undertaken by the Japanese and the Germans are certainly going to be almost in a hands-off area in the United States.

The CHAIRMAN. Of course, expediting the Justice Department's review procedures, I think, would be helpful.

Mr. WEARLY. That at least would tell us where we stood.

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[1] See p. 83.

The CHAIRMAN. That one particular point does give me some concern, because I have seen a number of these huge consortia formed for specific projects in some of these foreign countries, and it makes it just impossible for U.S. manufacturers and exporters to compete.

Mr. WEARLY. For example, let's say three Japanese steel companies—one has an excess of pipe, the other has an excess of plate, and the other of structural steel. They might be willing to put that out into a project at half, or less, of their regular price. They go together on that, and then they pull in other suppliers, and go out with a $2 or $3 billion project that is impossible for American companies to even consider.

The CHAIRMAN. Do you anticipate that the Presidential directives for the executive agencies to consider the export consequences of regulations and to review export controls used for foreign policy purposes will have a significant impact?

Mr. WEARLY. I do not have the knowledge to really comment on how effective those will be. I am a little bit concerned that they won't be effective.

The CHAIRMAN. It sounds good, but if they just simply don't give lip service to it. You can tell an agency to consider something and they can say, "well, we considered it."

Mr. WEARLY. That bothers me.

Mr. CHAIRMAN. As a result of the 1974–75 recession, governments in the industrialized countries have become much more active in supporting their domestic industries. Should it be our policy to seek a reduction globally in such intervention?

Mr. WEARLY. I think that is a thing we should always strive for. It is a great negotiating point, and to a great extent we can have some influence on them by sticking strongly to that purpose.

I think Mr. Fox, who has sat in on some of these negotiations, might like to comment on this.

Mr. FOX. I think the key areas which would constrain foreign government intervention are the following: A code dealing with government procurement, in other words, an open, on-the-record system; second, a code limiting subsidies, an on-the-record system; third, a system of import safeguards so that when countries impose import limitations they are required to inform the GATT as to what they do.

Additionally, when industries undertake inter-industry agreements, as between the U.K. ball bearing industry and the Japanese ball bearing industry, that that be reported to the GATT. At the present time, inter-industry agreements are not reported to the GATT and therefore are not public knowledge.

There are other major codes beyond that, but I think those three are the most important. I would add to that industrial standards, because obviously countries jiggle the industrial standards to favor their own manufacturers. I think in this respect the program outlined by Ambassador Strauss is comprehensive.

I think the proof of the pudding, however, will be in the eating. It will take quite a while to negotiate those agreements, and then they have to be implemented effectively.

I think one point that Mr. Wearly made is awfully important: To implement agreements that will really amount to anything will require a strong day-to-day monitoring of the efforts. That is one of the strongest arguments, in my opinion, for a Department of Inter-

national Trade and Investment that has the resources and the dedication to see that the agreements are really carried out.

The CHAIRMAN. What is your alternative? Assume that we can't negotiate the satisfactory agreements in these areas. What are you suggesting? You wouldn't suggest that the U.S. Government reduce our support of American industry unilaterally, would you?

Mr. FOX. My feeling is that if the United States would negotiate with resolve, we would achieve the objectives we seek, not fully at first, but we are the largest market in the world and that is our greatest negotiating lever. I absolutely agree that we should not emulate foreign competitors by resorting to neomercantilist tactics, import controls and Government intervention.

I think we should state objectives for liberal trade and liberal investment, and then proceed to negotiate ways to constrain other governments from pursuing their natural desires to have a free hand to promote their interests at the expense of the world economy.

Mr. WEARLY. Mr. Chairman, if I could add one comment We have clout when we are buying. We don't have clout when we are selling. So in the cases where we are the greatest market for many of these countries, if we really negotiate with resolve we have some real clout in those areas.

The CHAIRMAN. In your visits, Mr. Wearly, to other industrialized countries, have you discovered any industrial policies—tax adjustment assistance, subsidy programs, et cetera—that you think could be successfully applied in our country to restore the U.S. manufacturing sector's competitiveness?

Mr. WEARLY. Well, some countries have gone very, very far, and by that I infer farther than I would care to recommend. For example, in Brazil they support manufactured industries to the extent of zero tax on all exports, plus a bonus for exports. So that is just going too far. But that is what they do. All these countries that have a value added tax——

The CHAIRMAN. They have tremendously high tax, I might add, on imports.

Mr. WEARLY. Almost an impossible barrier on imports. So they clearly understand the game. I don't think the United States needs nearly the aid that these other countries give. We have to tone them down a little bit. But if we could just get America going so that we didn't look on profit margins as bad; let our industry get enough profit to really go after development projects. My company is holding up two things right now, which would, in the next 2 to 3 years, provide considerable exports, because we don't believe our profitability is great enough to take the risk.

If we got the whole environment feeling that exports are good and business is good, I think we could compete. In the meantime, in the immediate future we may have to go a little bit further than I think the long-range incentives would require.

Mr. BABSON. Mr. Chairman, if I could answer your question a little bit. We have testified before the Senate Subcommittee on Banking with respect to the incentives and the treatment of export incentives, trade incentives, tax and otherwise, in some detail for some 19 countries, and in further, greater detail for 6 or 8 countries. I would like, with your permission, to offer this to this committee for the record. I think it will help answer your question in detail.[2]

[2] See p. 77.

The CHAIRMAN. We would be happy to receive it. Your analysis has demonstrated a shrinking U.S. market share abroad and a rapid growth of manufactured imports into the United States. What are the implications of this apparent decline in our manufacturing competitiveness?

Mr. WEARLY. I think we need Government incentives for long-range capital formation, long-range efforts in research and development, so that we can move ahead with assuredness in those areas. Because without this, I'm afraid that all our present program will do is just curb a little bit our deteriorating position, instead of really changing it back to an upswing.

In other words, I am for some of the immediate programs that we have to do to stimulate exports. But what we really need in the long run is simply incentives, assured incentives for long-term capital investment and long-term willingness to put a lot of research and development into our economy.

The CHAIRMAN. Thank you very much, gentlemen. We appreciate your being here and giving us the opportunity of hearing your views.

[The statement follows:]

STATEMENT OF WILLIAM L. WEARLY, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, INGERSOLL-RAND CO., ON BEHALF OF THE NATIONAL ASSOCIATION OF MANUFACTURERS

EXECUTIVE SUMMARY

The NAM strongly supports the President's statement of a national export expansion priority. Most of the proposed program efforts to implement this priority are a positive and constructive step in the right direction. The program appears most deficient in the area of tax proposals, both in the short- and the long-run, and the continued call for the elimination of DISC is totally inconsistent with the objectives of an effective export expansion drive.

The clear recognition of export expansion as a national priority objective is a necessary prerequisite for a sustained effort to correct this nation's record trade imbalance. Concurrent with this resolve to take corrective action must be a clear understanding of the nature and roots of the problem. Deterioration of the U.S. manufactured goods trade account—traditionally the mainstay of an American trade surplus where it provides two-thirds of our export earnings—was the primary reason in 1978 for the continued growth of a record national trade deficit and is the core of the long-term U.S. trade challenge. In 1975 the U.S. had a trade surplus in manufactures of about $20 billion, and this year it will have a manufactures deficit of $10 billion or more. While other factors, including the U.S. oil import bill, have gained national attention, problems arising from the loss of U.S. market shares in manufactured goods—especially capital equipment, high technology products and systems—must be central to an export expansion drive.

Two export expansion programs are really needed: one for today and one addressed to longer-term problems. The President's program must be followed up with subsequent steps to tackle the fundamental job of stimulating a level of productive capital investment in this country which will keep our domestic industries healthy as well as increase the competitiveness of U.S. exports in world markets. An equally challengeing task is to set constraints on government actions which are restricting U.S. exports—both foreign government actions concerning non-tariff obstacles to trade and self-imposed restraints that the U.S. government places on its own export sector for non-economic policy reasons.

NAM recommends that changes or adjustments be made in the President's export program so that it most effectively addresses the following eight policy issues:

1. Export expansion priority.—NAM endorses the President's strong statement that U.S. priorities must be changed to accord a high priority to export expansion objectives. The success of this effort, of course, will depend on a continued firm policy commitment and practical implementation steps. NAM supports the allocation of more funds to Commerce and State Department export development

activities, to include a computerized information system and targeted assistance to high export potential firms and industries. Additionally, the confusing current multiplicity of federal government departments and agencies which play a role in international economic policy-making and implementation has impeded past export expansion efforts as well as other international economic objectives. Therefore, we urge consideration of more extensive reorganization needs, including the proposal for a Department of International Trade and Investment.

2. Taxation.—NAM opposes the Administration's continued recommendation to dismantle the Domestic International Sales Corporation (DISC) program, especially at a time of demonstrated export promotion needs, and while our Government is negotiating this and related subjects in the Multilateral Trade Negotiations (MTN). We note the Administration's attention to the problem of the tax treatment of Americans living abroad, many of whom perform sales and service roles vital to corporate export expansion programs. NAM urges administration support for a proposal along the lines of the House-passed bill on Section 911 provisions. Over the longer-term, national tax policies must be constructed which will address the fundamental capital formation needs of U.S. industry, which are essential to a healthy domestic economy as well as increased U.S. export competitiveness in world markets. A longer-range study of the U.S. tax system is needed as to whether it favors or disfavors investment vs. consumption—including a systematic analysis of the pros and cons of the value-added tax system in effect in Western Europe.

3. Export credit.—NAM supports the President's proposal to increase the financial resources of the U.S. Export-Import Bank to allow greater flexibility in U.S. financing packages so as to be more comparable to those offered by our foreign competitors. We also commend his directive concerning further efforts to negotiate an international accord placing further limitations on governments' international export credit practices, but believe that such efforts must be realistic and comprehensive and not simply limit certain devices like interest rates, term of years, etc. which mainly tie the hands of U.S. lending authorities.

4. Regulation of U.S. exports.—NAM supports the President's directive that the export consequences of domestic regulations should be fully considered and reductions made in the negative impacts wherever possible. Additionally, we support full consideration of the export consequences and third country availability regarding the use of export controls for foreign policy purposes. However, we would urge the Administration to carry forward these directives by (a) assuring that full use is made of all normal diplomatic and political tools before resort is made to export control devices for foreign policy purposes; (b) specifically exempting Eximbank along with Commerce and Treasury Department licensing procedures from the application of environmental regulations affecting foreign country sovereign territories; (c) proposing to Congress the repeal of 1976 tax provisions regarding international boycott policy, since national policy and regulations in this area are now fully established under the Export Administration Act.

5. Multilateral trade negotiations (MTN).—NAM urges the President to conclude substantial and significant agreements in the MTN, placing constraints on governments in key non-tariff areas—which constitute the means by which governments intervene in economic policy to limit imports, promote self-sufficiency goals and create export industries. The future success of U.S. export expansion efforts will depend on the type of world trade framework which emerges from the MTN just as much as on other efforts taken here at home. The key international codes relate to Government procurement, subsidies and import safeguards.

6. Antitrust.—NAM supports the President's call for expediting Justice Department antitrust review procedures and other clarification actions to help dispel business community concern over application of antitrust regulations in export-related areas. Further, we urge the President to seek a redefinition regarding the Webb-Pomerene Associations so as to include U.S. service industries, such as engineering and constructors, and improve Federal Trade Commission procedures to encourage greater business participation.

7. Small business.—NAM supports the re-targeting of some Small Business Administration funds for exporter assistance, but points out the limited nature of this action. Other specific, non-monetary measures also are possible which will effectively promote the involvement of small business in the national export expansion campaign, either as direct exporters or suppliers to U.S. exporting companies.

8. Export Council.—NAM supports a revitalized Export Council to demonstrate a broad-based national commitment to a priority export expansion program. We urge that the Administration make full utilization of the potential of such a group, particularly to: (1) estabilsh goals and monitoring procedures to assure that export expansion objectives are in fact achieved in an effective and timely fashion; (2) evaluate and make recommendations regarding longer-term policy issues to improve the Nation's export position on a sustained basis.

NAM believes that all segments of the American economy should work together to achieve the national export expansion goals outlined in the President's statement. However, we would caution that prompt follow-up actions by the Administration to demonstrate these altered priorities and attention to the longer-term, fundamental problems of U.S. capital formation needs and increased productivity are essential to assure the program's success.

STATEMENT OF THE NATIONAL ASSOCIATION OF MANUFACTURERS

Mr. Chairman and members of the Committee, I am William L. Wearly, Chairman and Chief Executive Officer of the Ingersoll-Rand Company. I am appearing today on behalf of the Natioanl Association of Manufacturers (NAM) as Chairman of the NAM International Economic Affairs Committee. As you know, NAM is a voluntary, non-profit association of some 13,000 business firms, large and small, located in every state of the nation. The Association's member companies account for about 75 percent of American industrial output and provide about the same percentage of the nation's industrial jobs. My own firm is primarily a producer of heavy capital equipment, along with some consumer products. We have manufacturing plants in 24 states and serve or do business in 119 foreign countries. Our sales amount to over $2.1 billion, of which more than $400 million consists of machinery and equipment exported from this country. More than 6,000 of our employees in this country, or nearly 20 percent of our domestic work force, are engaged in export-related jobs. I am pleased to appear before this Committee today to express the views of American industry, and particularly those of the National Association of Manufacturers and my own company, with regard to the need for a successful export expansion program. I believe the President's program for export expansion as outlined by the White House on Tuesday constitutes an important step in the right direction. But, it is only an initial step. The problem in the U.S. trade position has been developing for at least the last decade and a half, and perhaps longer. Therefore, the solution also will take many years to achieve.

The observations which I will make in the course of this testimony are based, on the broadest experience of American industry—all aspects of industrial production, including industrial raw materials, consumer goods, intermediate products, and capital equipment. However, since my company is particularly concerned with capital equipment—we are a major exporter of all types of mining, industrial machinery, compressors, oil-field related equipment, as well as some consumer goods—my observations will include some illustrations that are specifically pertinent to this product area.

EXPORT EXPANSION: WHY IS IT NEEDED?

The United States is now experiencing the greatest trade deficit in its history. Based on projections from the first 8 months of this year, the overall 1978 trade deficit will probably exceed $30 billion. The general dimensions of the 1978 trade problem are well known by now. What is less well known is that the primary cause of the deterioration in 1978 has not been oil imports. In fact, our oil deficit has improved this year compared to 1977. The main source of the deterioration of the trade balance is now the manufactured goods sector.

The United States is essentially a manufactures exporter. Manufactured goods provide two-thirds of our total export earnings. (See table No. 1, appendix.) It is not difficult to grasp the tremendous change which has taken place in our international competitive position for manufactured goods in the past few years. In 1975, we had a trade surplus of roughly $20 billion in manufactured goods: in 1978, we will have a deficit of $10–12 billion in this area, a negative swing of over $30 billion in only 3 years. (See graph No. 1, appendix.) To illustrate the seriousness of this situation, bear in mind that the United Kingdom in 1977 had a trade surplus in manufactures of roughly $10 billion. The United Kingdom, an economy less than one-eighth of the size of the United States, and one

whose industry has experienced great competitive and inflationary problems, is used for illustrative purposes only to demonstrate the seriousness of our own problem.

With a longer perspective, it is clear that U.S. manufacturers trade has been in difficulty since the mid-sixties. From 1965 to 1970, import growth rates for manufactures averaged 18.6 percent annually compared to an average export growth rate of only 11.3 percent. In 1972 the United States recorded its first deficit in manufactured goods in half a century.

Deterioration has occurred in the trade balances of most of our product sectors in the 1970s, including the capital goods sector, with which I am most familiar. For all manufactures, the U.S. share of world exports in 1977 was 19.9 percent. This market share is lower than in 1970, notwithstanding the successive devaluations of the dollar. For capital goods, a similar decline has occurred. In 1964, the United States sold more than 30 percent of world exports of major capital goods; by 1976, this figure had dropped to 23 percent. (See table No. 2, appendix.) U.S. export growth rates for major capital goods have lagged behind the overall rate for all OECD countries.

The difficulties experienced by U.S. exports in various product sectors is also apparent if we look at geographic markets. From 1970 to 1976, the United States lost market shares in Japan, the European Community, and the rest of Western Europe. The United States also lost export market shares in every less developed area except the Middle East. (See table No. 3, appendix.) Even in the OPEC countries, which represent the world's most dynamic export market, U.S. export growth is tapering off while countries such as Japan, West Germany and South Korea mount determined export expansion programs. The case of South Korea is especially revealing. Beginning in 1972 with a negligible level of OPEC trade ($40 million), then, exporting $1.2 billion to this market in 1977.

Several of the rapidly industrializing non-OPEC countries of the Third World are becoming major trading partners of the developed world as well. Six countries—Hong Kong, Singapore, Taiwan, South Korea, Mexico and Brazil—now supply 16 percent of alli U.S. manufactured imports, having doubled their share of U.S. manufactured imports since 1970. Yet, illustrative of the problems facing our export expansion efforts, the United States is not succeeding in selling significantly more to these growing markets, where the share of U.S. manufactured exports has barely grown since 1970 (See table No. 4, appendix.) While some officials attribute this fact to economic stabilization programs in these LDCs which have curtailed their purchases from abroad, it seems that these programs curtail purchases from the United States more than those from our industrialized world competitors. Exports of all industrial countries to advanced developing nations grew by 10.1 percent in 1977, while U.S. exports grew by only 3.2 percent.

The United States must now manage a trade account which already was undergoing many painful changes even before the abrupt quadrupling of oil prices in 1973–74. The advent of the oil deficit makes the search for a better export policy even more urgent. Indeed, a strong export policy has been the approach of other major trading nations, such as Japan and West Germany, whose dependence on imported oil is nearly total. Those countries have succeeded in accumulating large trade surpluses, in large part because of their national commitment to export growth.

Some will argue that exchange rate developments—further devaluation of the dollar or revaluation of the yen and the mark—will rectify the U.S. trade problem. Others may contend that it is mainly due to the business cycle; that is, that because the United States has grown more rapidly than Japan or Western Europe in the last few years, it is importing more and exporting less than other countries in response to this conjunctural business cycle situation. I don't think you expect me to illuminate this problem beyond the statement of these viewpoints; you have other witnesses for this purpose. I will state, however, that reliance on exchange rate developments or business cycle changes to correct the American trade position and improve the U.S. balance of payments position more generally, represents a theoretical view widely held by many economists, but shared by virtually no businessmen.

Much of the responsibility for the poor performance of U.S. exports must fall on government, both the United States and foreign governments, for their increasingly interventionist role in international business transactions. The U.S. Government, for its part, recently has been succeeding more in discouraging rather than promoting increased exports. While this result probably is due more to inadvertence than design, it reflects the relatively low priority that export

expansion has had in the listing of national policy goals. Thus, the absence of effective export stimulants, the continued growth of bureaucratic redtape and the often counterproductive use of presumed export leverage to pursue non-economic policy objectives, have all served to place a series of self-imposed restraints on U.S. exports.

The ability of American exporters to compete effectively in foreign markets also has been seriously impaired by the interventionist industrial policies of foreign governments, designed to foster their own industries and create additional employment, as well as to earn foreign exchange to correct their own trade account problems. Most major projects, for example those requiring financing in the $2 billion to $3 billion range, can hardly take place anywhere in the world without official government support one way or another—with the exception of projects within the U.S. economy at home. In providing financing and other support for such major projects, governments have to a greater degree than is commonly understood, adopted neo-mecantilist policies by which they hope to limit imports, satisfy internal markets and create the necessary productive capacity to generate an export surplus to earn foreign exchange. These policies may be pursued by foreign governments to pay for the higher price of imported oil or in the interests of their domestic economic and social policies. Nevertheless, such interventions distort international market forces and are just as responsible for the current problems of the dollar as the so-called lack of competitiveness of U.S. manufacturers.

In so saying, I must also note that American industry is not as competitive today as it was some years ago because of insufficient new investment. Our society is consumption-oriented, which is another way of saying that in terms of tax or other incentive policies, we are oriented negatively with respect to promoting new productive investment. What has to be done in the longer-run is to create a climate in the United States which makes American industry investment-oriented in relation to new plants, as well as research and development (R. & D.) oriented in connection with these new investments. It probably will take a number of years to develop policies which will create the conditions to reverse the past two decades trend that has favored consumption at the expense of achieving further production efficiency. I am convinced that it can be done, and the export expansion effort is one aspect necessary to the creation of this broader climate which gives emphasis and rewards to the creation of investment and jobs in the U.S. private sector. With an effective export expansion effort, we will be better able to deal with inflation at home by reducing unit production costs. We will be able to export more and thereby earn foreign exchange to pay for our oil and other import bills. We will be able to re-establish traditional American leadership in innovative production technology.

A bit later in my testimony I will provide examples, or answer questions, which will illustrate several major industrial projects in the United States and abroad which my company is not undertaking or is not likely to undertake, simply because industrial profits are relatively too low and the economic conditions at home and abroad are too uncertain due to increased government intervention to warrant the major risks involved. Stated more simply, we don't have the money to accept risks whose government-inspired dimensions we cannot assess in today's uncertain domestic and international business climate.

I will now turn to the specifics of the President's export expansion program, which I would like to emphasize again, I commend and generally support as an initial effort. I will indicate areas in which I believe the program can be improved further, both in the short-run and in the long-run, and will cite contradictions—as in the elimination of the DISC.

Personally, I believe we need two export expansion programs: One for today and one addressed to the longer-range problems facing our economy and the difficulties of further opening foreign markets to American goods. I believe that the President has recognized in his program that the American trade balance problems have been building up for some years; therefore, it is not surprising that it should take a number of years to solve some of the more fundamental underlying problems respecting American industrial competitiveness. It is a recognition of reality that we need a longer-term commitment to industrial growth and export expansion if we are to succeed in maintaining and improving the American standard of living. In the context of international trade and the value of the dollar, there is nothing we can do that would be more valuable than to adopt a national strategy to improve our export performance for today and tomorrow and for the rest of the 20th century.

SUMMARY OF THE PRESIDENT'S EXPORT EXPANSION PROGRAM

The President in his opening statement indicates the high priority that his Administration is now placing on exports. The major thrust of the President's proposals is toward: providing increased direct assistance to U.S. exporters; reducing domestic barriers to exports; and reducing foreign barriers to U.S. exports and securing a fairer international trading system for all exporters.

DIRECT ASSISTANCE TO U.S. EXPORTERS

1. Export-Import Bank: Following a five-fold increase in Eximbank's fiscal year 1979 loan authorization to $3.6 billion, the President is proposing an additional $500 million for fiscal year 1980. This funding increase is intended to permit the Bank added flexibility in setting term and rate structures for its loans.

2. SBA loans to small exporters: SBA will redirect $100 million of its current authorization into loan guarantees for small exporters to enable them to break into the export market.

3. Export development programs: An additional $20 million is allocated to Commerce and State Department export development programs to establish a computerized export opportunity information system; risk sharing programs to assist small companies to meet initial marketing costs; and sepcial assistance targeted to business with high export potential.

4. Agricultural exports: Noting that over the past 10 years the volume of U.S. farm exports has doubled, the President proposes that the already strong performance in this area should be bolstered by increasing to almost $1 billion the level of short-term agricultural export credits and increasing by 20 percent the funding of commodity market development programs. Additional efforts will be made within the MTN to link treatment of agricultural and nonagricultural products, and a special focus will be placed on attaining an equitable international Wheat Agreement.

5. Tax measures: The President reiterated his support for tax relief for U.S. citizens working overseas and restated support for his proposal to revise section 911 of the Internal Revenue Code, while opposing other proposals on grounds of budget prudence and tax equity.

Administration opposition to DISC is reaffirmed in the President's statement, as is his hope that if not discontinued the DISC could be made less costly and more effective.

Reduction of domestic barriers to exports

Central to the President's proposals is the elimination of self-imposed disincentives to exports. In particular, the President is urging greater sensitivity to the export effects of government laws and policies.

1. Export consequences of regulations: The President directs the heads of all Executive departments and agencies to weigh the effects of their administrative and regulatory actions in terms of export consequences. They are to report on ways to reduce such negative effects where possible. The President indicates his intention to instill a greater recognition among government decisionmakers of the export-effects of their actions.

2. Export controls for foreign policy purposes: The President directs the Departments of State, Defense, Commerce, and Agriculture to take export consequences into account when considering the use of export controls for foreign policy purposes. Of special importance is the requirement that third party suppliers be considered when calculating the effectiveness of any export control.

3. Foreign Corrupt Practices Act: The Justice Department will provide guidance to business regarding its enforcement priorities relating to the recently enacted Foreign Corrupt Practices Act.

4. Antitrust laws: The Justice Department, together with the Commerce Department, will undertake to clarify antitrust laws, particularly concerning joint ventures abroad.

5. Environmental reviews: The President will clarify the question of the application of the National Environmental Protection Act to exports by issuing an Executive order stating that Environmental Impact Statements will not be required for Federal export licenses, permits and approvals. Commerce and Treasury Department export licenses will be exempt from any environmental reviews, but abbreviated reviews will be required elsewhere to cover exports of nuclear reactors, export financing of products with serious toxic risks, and certain Federal actions affecting third countries' environments or global natural resources.

Reduction in foreign trade barriers and subsidies

The United States will press for the elimination or reduction of tariff and nontariff barriers through the Multilateral Trade Negotiations. A major objective is agreement on a code restricting government subsidies for exports. The President also is directing the Secretary of the Treasury to expand and tighten the terms of the International Arrangement on Export Credits.

Conclusion

The President is asking the Secretary of Commerce to direct export expansion efforts, and he will soon sign an Executive order to reconstitute the President's Export Council which will report to him annually.

EXPORT EXPANSION—THE NECESSARY ELEMENTS

The President's export expansion program outlined above was only available to us one day prior to this morning's hearings. In fairness to all concerned, a detailed evaluation of each of these proposals should be undertaken only after the careful and thoughtful study that hearings such as this one can promote. Therefore, with the committee's permission, I would prefer to comment upon the administration's proposals as they relate, or do not relate, to what we feel are the necessary ingredients of any effective export expansion effort. In particular, I would like to cover eight specific subject areas: (1) Export expansion priority, (2) taxation, (3) export credit, (4) regulations affecting U.S. exports, (5) the Multilateral Trade Negotiations, (6) antitrust, (7) small business exports, and (8) the Export Council.

Export expansion priority

NAM endorses the President's strong statement that U.S. priorities must be changed to accord a high priority to export expansion objectives. The success of this effort, of course, will depend on the continued firm policy commitment and practical implementation steps. The administration's program calls for the allocation of additional funds to Commerce and State Department export development activities. These resources would be used to operate a computerized exporter information system, target assistance to firms and industries with high export potential and other similar programs.

This national export policy statement and increased funding of export development activities should provide some short-run benefits. However, a more extensive and fundamental examination also should be made of the full executive branch organizational structure pertaining to both the formulation and implementation of international economy policy. This topic is one of the areas reportedly being studied by the President's Reorganization Project team examining economic policymaking. We hope that their recommendations will soon be completed and made available for public comment.

A broader executive branch reorganization should serve two complementary purposes. First, it should seek to guarantee that export promotion and other international economic objectives have a strong policy advocate in top governmental councils. Second, export promotion and other commercial assistance programs should be consolidated into a more integrated and easily used structure.

Since the beginning of this year, we have had a special task force of NAM's International Economic Affairs Committee examining a bill (S. 1990) introduced by Senators Abraham Ribicoff and William Roth, which I understand also is cosponsored by Senators Daniel Inouye and Donald Reigle of this committee, to create a cabinet-level Department of International Trade and Investment. If certain modifications were made in this proposal, particularly the incorporation of an inter-agency coordinating mechanism, it would have much to commend it. For the first time, there would be a cabinet-level officer of the Government, backed by full departmental staff resources, whose primary policy mission would be to look after U.S. competitiveness in the international marketplace. The institutionalization of this role would reflect the new realities of international economic policy objectives when decisions are made at high policy levels. Additionally, the consolidation of trade and investment activities into one department would provide a more integrated and understandable structure for business to work with on export expansion activities. I personally strongly favor the adoption of a modified version of the bill, S. 1990, to create such a new Department of International Trade and Investment and urge the administration to fully and carefully examine this concept prior to the next session of Congress.

Taxation

The President is continuing to urge a phaseout of Domestic International Sales Corporations (DISC) although he indicates a willingness to work toward some alternative, "less costly and more effective" formulation. The NAM feels that this position is clearly disadvantageous to U.S. exporters and is unwarranted in view of the positive contributions that DISC has provided to the national economy through its promotion of American exports.

In the face of a mounting trade deficit and ever-increasing efforts by foreign governments to actively spur their exports, it is imperative that the United States not abandon a proven incentive for export growth. Indeed, it seems strangely ironic that in commenting upon a new export expansion program, we must engage in the defense of one of the few mechanisms of export expansion available to U.S. business. In fact, I believe that it has been the equivocating position of the U.S. Government toward the DISC program which has discouraged many corporations, particularly more smaller business firms, from building an export strategy utilizing a DISC, for fear that the program would face imprudent elimination at any moment. We are appreciative of the contracting support given to the DISC program by many members of Congress.

In assisting companies to invest needed capital in export manufacturing capacity, we believe that DISC has shown its ability to aid U.S. export growth in two ways: (a) By providing cash-flow and capital for new plant and equipment located in the United States; and (b) increased export sales promotion push for American-made products. Estimates from the Treasury Department show that the initial impact of DISC in stimulating exports was $4.6 billion in DISC-year 1974 and $7.6 billion in 1975. Extrapolating to the national economy, it is estimated that DISC-related GNP expansion amounted to $21.7 billion in 1975, along with the creation of one million jobs and $5 billion in increased Federal revenue.

In the long-run, there are very important and fundamental tax issues before us, especially regarding capital formation which will serve both domestic and international economic policy objectives. Issues such as the investment tax credit, more rapid depreciation, and reduction of the corporate income tax rate are essential to increased industrial investment. However, for the present, no other tax instrument can enhance our export capacity as directly as the DISC, and it woudl be counterproductive to the objective of bolstering U.S. exports if we were to dispense with it now.

One other important taxation issue concerns the treatment of U.S. workers stationed overseas. Prior to 1976, the traditional $20,000 earned income exclusion for U.S. workers was one means of offsetting the prohibitive cost of maintaining corporate employees overseas. Since their reduction in the Tax Reform Act of 1976, Section 911 tax provisions have become another inhibiting factor affecting the competitive posture of U.S. companies in overseas markets. Prompt and favorable resolution of this issue would be an integral part of the formulation of any overall U.S. export policy. As long as the cost of maintaining personnel overseas is made prohibitive by self-imposed costs, the goods that those personnel market, construct or service are made correspondingly less competitive with the goods of foreign companies which, in fact, are encouraged through their own government's tax policies and other means in the placement of needed corporate personnel abroad. Over the short-term NAM favors the adoption of Section 911 language along the lines of a bill (H.R. 13488) passed earlier this week by the House of Representatives which would restore the $20,000 earned income exclusion and would institute a series of cost of living reductions aimed at compensating U.S. workers for the added burden of overseas residence. We do not consider the Administration's original proposals regarding the revision of section 911 provisions as an adequate solution to the problems and therefore recommend Administration support for change along lines of the House-passed bill.

Finally, longer range tax measures should be considered. The value-added tax, for instance, is now widely used throughout Western Europe. Comparable indirect taxes are used in Canada, Japan and many other countries. The effect of the value-added tax, of course, is not only export stimulative, and import dampening, but perhaps most important of all it tends to stimulate investment. While NAM has no policy position on the value-added tax, it is an example of the type of major long-range issues which need serious study.

Export credit

The President's export expansion program properly calls for a strengthened and more competitive Export-Import Bank (Eximbank). The NAM has for many

years urged that Eximbank's financial resources be expanded and its flexibility enhanced. Happily we have begun to experience a turnaround in the performance of the Eximbank and find that it is becoming as supportive of U.S. exports as its resources and regulations will permit. A combination of new leadership and a $40 billion reauthorization bill currently pending before Congress should enable Eximbank to resume a vigorous program of competitive export financing. The recommendations contained in the President's export expansion program will go even further toward assuring the availability of financing resources compatible with the nation's export objectives.

Over the short-term, we would urge Eximbank to adopt as aggressive a posture as its mandate will allow. In particular, it must be as flexible as possible when going head-to-head with the export credit facilities of our major trading competitors. In 1976 the Eximbank faced an embarrassing situation of having uncommitted funds on its books at year-end at a time when U.S. exports were being lost for lack of competitive financing support. Eximbank should make every effort to assure that there is no repetition of that event when its anticipated new expanded loan authority expires in 1983.

Additionally, the U.S. export credit system is greatly disadvantaged relative to our foreign competitors by lack of a system of mixed credits to finance major projects in the non-oil developing countries. Other major industrialized countries are in a position to mix aid-type concessional financing (for example, low interest and/or very extended maturities), whereas the U.S. system precludes this. The difference is a significant factor in the relative decline in U.S. export shares to certain developing countries.

Over the longer-term, advances must be made in the systematic negotiation of international export credit practices. With official credit facilities far different from our own Eximbank, most foreign governments have been reluctant to negotiate harmonization. Since the export sectors of our major trading partners comprise a greater proportion of their GNP, it is to be expected that their export credit practices may be both more integrated and innovative. However, with our own export sector assuming a greater national importance, we can no longer ignore the superior credit schemes or practices of competitor countries. Just a couple months ago, my own firm lost a transaction in Mexico which would have involved some $5 million in U.S. exports because the intervention of the Italian government in support of its own national company resulted in a financing package which provided a full 30 percent price differential to the best export credit financing that we could offer.

We support the President's directive concerning further efforts to negotiate an international accord placing some limitations on governments' international export credit practices, but believe that some efforts must be comprehesive and not simply limit certain devices like interest rates, terms of years, etc. However, failing to achieve a fully satisfactory international credit agreement, Eximbank programs should be made fully competitive with credit facilities provided by foreign competitor countries, as required by the Eximbank statute.

Also central to a more competitive Eximbank is the elimination or modification of a series of statutory provisions which increasingly mire Eximbank down in issues extraneous and counterproductive to its primary mandate. These requirements, which cover issues such as human rights and environmental reporting, are with greater frequency inhibiting the Eximbank from making timely and competitive responses to the financing needs of U.S. exporters. I would like to discuss these and other such self-imposed export restraints under the general heading of "Regulations on U.S. Exports".

Regulations on U.S. Exports

The recent proliferation of regulations on U.S. exports is one of the most serious and certainly the most frustrating of the self-imposed constraints on our export. This hearing probably is not the place to detail or document the extensive list of such regulations. I understand that there currently are hearings elsewhere in the Senate regarding the role and impact of some of these regulations on U.S. exports. Certainly this topic will be high on the agenda of the new Congress when it considers an extension next year of the Export Administration Act.

NAM fully supports the President's directive that the export consequences must be considered in regard to domestic regulations and his effort to place some limits on the use of export controls for foreign policy purposes. Let me address in slightly more detail just three of the regulations which are directly pertinent to aspects of the President's export expansion program: environmental restrictions, foreign policy considerations and anti-boycott regulations.

One recent entrant to the center stage of U.S. national export policy is a concern with environmental issues first addressed on the domestic level. There has been much discussion and even legal proceedings concerning the application of U.S. environmental law, in particular the National Environmental Policy Act (NEPA) to the foreign economic activities of U.S. Federal agencies. Debate has centered on a draft Executive Order spelling out the basis for such an application and, as I mentioned above, the U.S. Export-Import Bank is a prime candidate for these environmental controls. The President's recent Executive Order precludes mandatory application of environmental regulations in foreign situations and places some other constraints on this area, but leaves a number of troubling questions concerning the use on an "abbreviated" environmental review procedure. We would urge that Eximbank be specifically exempted along with Commerce and Treasury Department licensing procedures from the application of environmental regulations affecting foreign country sovereign territories.

The NAM recognizes the need for U.S. business to meet local environmental standards throughout the world no matter where it is doing business. Yet we are equally aware that attempts by the U.S. to dictate unilaterally those standards throughout the world not only will likely fail, but in the process such regulations will deprive us of business and this country of exports that generally then will be supplied by other foreign companies.

Environmental reporting and evaluation requirements imposed on U.S. exporters would ultimately simply complicate further the world's more complex and slow-moving export control bureaucracy, and consequently diminish further our ability to meet and overcome foreign competition. As long as the U.S. acts unilaterally in this matter—as it has done in so many other areas—the only loser will be U.S. companies and thereby American workers and shareholders. We are being naive if we think that the U.S. still holds the key to technology as it once did; and we are deluding ourselves if we think that because the U.S. declines to let its companies participate, that a project will not go forward. It will go forward, and it just makes the task of our German, Japanese and other competitors that much easier if we are not around to offer U.S. export alternatives.

Any serious improvements in global environmental controls must come through a cooperative, multilateral approach where we all operate by the same rules and guidelines. Otherwise, we will find out Export-Import Bank and other U.S. agencies further incapacitated in their efforts to help expand U.S. exports.

The President has indicated in his export policy proposals that future use of export controls as a tool of foreign policy must not be indiscriminate; that in fact, when considering making such controls, weight will be given to the export consequences of the action and whether the goods are available from other countries. NAM recognizes that this issue area is particularly sensitive and probably is less susceptible to the establishment of clear criteria for the use of export controls than regards other policy justifications. We support the President's recognition of the need to consider export consequences and also the availability of third-country sources. Nevertheless, we urge that one additional step be considered along the lines of a Presidential statement that all normal diplomatic or political tools be utilized before resorting to economic leverage to the disadvantage of U.S. suppliers.

We hope that the attempt to interject more clarity and less arbitrariness into the use of foreign policy controls does not have the counterproductive effect of promoting their availability as a ready-made response to complex foreign political problems. We believe that a Presidential statement concerning the principal reliance on diplomatic and political tools would help discourage such a development. All too often unrelated controls on private business transactions will only result in (1) foregone sales and the related employment, (2) a long-term impairment of U.S. competitiveness, (3) an unattained policy goal or even a counterproductive effect on the target country's policy, (4) retaliation against U.S. interests, and (5) inconsistent U.S. policy objectives, with commercial and political goals both sacrificed by putting the two at odds with each other. Over the longer-term, we hope that the application of export controls as a tool of foreign policy will become less pervasive.

A current example of a complex issue involving foreign policy and other national interests is the U.S. response to international boycotts—most specifically relevant to the Arab boycott of Israel. However, we believe that this example also illustrates how the regulations can be made unnecessarily complex and restrictive beyond meeting legitimate national policy objectives.

U.S. exporters must now cope with an array of sometimes contradictory and always befuddling Treasury and Commerce Department regulations in their trade with Arab states engaging in an economic boycott of Israel. Provisions of the 1976 Tax Reform Act originally passed Congress when there was no statute adequately or expressly covering such a subject. The Export Administration Act, which is the logical vehicle for such national policy provisions, was subsequently passed in amended form to cover the antiboycott issue. At the time of the Tax Reform Act's adoption, we set forth our opposition to using the already overly complex tax code to deal with anti-boycott regulations, thereby setting a precedent for resolving admitted conflicts between Treasury and Commerce Department antiboycott regulations—recommend to Congress the repeal of the Tax Reform Act provisions. If Congress would take such action, the statement of national export control policy and the implementing regulations regarding international boycotts would rest in one appropriate place. Although the Commerce Department's antiboycott regulations are themselves exceedingly and at times unnecessarily complex and burdensome, they are at least the appropriate regulatory mechanism for addressing this important policy issue.

The remaining issue, of course, concerns the effectiveness of the chosen U.S. policy when weighed, as the President's program calls, for, against national export expansion interests. There should be no doubt that the current method of addressing the boycott problem is costing us export sales and jobs. Early this year Ingersoll-Rand lost a $150 million order in Iraq due to boycott regulations; the order was filled by a Japanese/Italian consortium. We also have other orders which have been delayed and may eventually be lost. The boycott issue is illustrative of a difficult cost/benefit question where export expansion objectives conflict with other national policy interests. I would venture that this conflict could have been handled better if we had utilized the suggested position that all normal U.S. diplomatic and political tools be tried fully first before turning to cumbersome export regulations. Undoubtedly the anti-boycott provisions passed by the Congress were intended, at least in part, to strengthen the President's hand in such diplomatic negotiations. However, I would suggest that the new weapon emerged wrapped in a mile of redtape that simply ties up U.S. companies and probably impairs the instrument's intended function as well. We believe that all parties with interests in this matter should again sit down to reevaluate the objectives and the instruments to see if perhaps a more suitable match could be arranged.

Multilateral Trade Negotiations

The Multilateral Trade Negotiations (MTN) now drawing to a close in Geneva offer the best avenue for expanding U.S. exports within the context of growing world trade. These negotiations will set the framework of global trading relations well into the 1980's, thereby influencing the potential success of any U.S. export expansion effort. Recent economic growth has been sluggish in most countries, a situation not conducive to the types of mutual concessions and give-and-take upon which successful trade-expanding bargains can be struck. Additionally, rising government intervention in the marketplace, featuring increased use of both overt and indirect export subsidies, as well as other distortions to trade, have placed a heavy burden on the negotiators. A continued liberalization of world trade requires, in particular, substantial progress in restraining the use of non-tariff measures to distort or restrain trade. Several multilateral codes currently are being negotiated on the most important non-tariff measures, including subsidies, government procurement, standards, customs valuation, and an international safeguards mechanism.

As governments intervene more and more in the economic process, segments of international trade begin to reflect the size of an industry's government subsidy instead of its comparative efficiency in making a product demanded in world markets. An effective subsidies code is essential to address not only the cases of direct subsidies, which of course are the subject of countervailing duty provisions under U.S. law, but also the multifarious indirect subsidy arrangements. This latter group can include different forms of industrial aids, R. & D. assistance, indirect tax rebates, agricultural export subsidies and regional development aids. Indirect subsidies which appear to have purely domestic aims can still unfairly advantage a country's exports. The Japanese computer industry has been aided by government-directed merger, subsidized finance, R. & D. assistance and assured government purchases. Clear international guidelines and enforcement mechanisms must be established to curtail or eliminate the distorting effects such subsidies have on world trade.

Government procurement is another key area in which progress is imperative to assure that American exports have the opportunity to compete fully in world markets. Government purchases should be carried out in a fair and open manner which normally will permit foreign suppliers to compete on the same basis as domestic suppliers. An inter-governmental accord is also necessary to establish a complete, on-the-record safeguard system covering not only government-to-government agreements which limit trade flows, but also private industry-to-industry agreements. The Geneva trade talks should provide a mechanism for the selective use of safeguards, with formal notification to the GATT required.

In general, the United States must press for a conclusion to the multilateral trade negotiations which will set significant and substantial constraints on governmental intervention in the marketplace. In the kind of neo-mercantilist world we see emerging, all of the tools available to government will be used vigorously. In the longer-run, the achievement of a freer and fair framework of world trade growth will be equally important with steps taken here at home to promote the priority objective of national export expansion.

Antitrust

The administration's export expansion program calls for expediting Justice Department antitrust review procedures and other clarification actions to help dispel business community concern over application of antitrust regulations in export-related areas. NAM supports this proposal, and recommends that the Administration take an additional step to expand Webb-Pomerene Associations to include the service industry. Clearer Federal Trade Commission procedures and guidelines for forming Webb-Pomerene Associations would also help encouragement expanded business participation in these export organizations. NAM recommended the adoption of all these steps in a report published in 1974 entitled, "The International Implications of U.S. Antitrust Laws."

While the use of Webb-Pomerene Associations likely will not be appropriate for all or even a majority of the nation's industries, it is a useful device to allow American firms a limited antitrust exemption to compete against foreign cartels and consortia for business in international markets. This mechanism should prove very useful in the service field, particularly regarding engineering and construction, as well as in industries where the United States may not have a technological comparative advantage, but where American firms still can compete for a share of world market.

Small business export promotion

The administration's export expansion program includes several items directed toward increasing small business exports. Currently only about 8 percent of the Nation's manufacturing firms are involved in exporting to overseas markets and NAM concurs that an effort to increase this number is essential. It is only realistic to concede that the majority of export sales will still come from large, international U.S. companies whose overseas operations and established sales networks stimulate a demand for U.S. export items. However, numerous small and medium-sized firms have succeeded in the international marketplace and many more participate in the export economy through a supplier relationship with larger corporations that maintain pull-through export operation overseas. This direct exporter/supplier relationship is all too often overlooked and offers great potential as a part of the real life chain occurrences referred to as the "ripple effect" of U.S. exports. For example, my own firm buys various components for our exported products from approximately 6,100 U.S. suppliers, over half of whom are small businessmen. There is good potential for other small businessmen to join the ranks of direct exporters or exporter suppliers—if provided with proper encouragement and adequate support.

The administration is proposing that the Small Business Administration earmark $100 million in existing funds to promote small business exports. While supporting the goals of this proposed effort, we would suggest that the Administration is providing only about a pint of gasoline to fuel the small business export engine. This observation is not made to suggest that a better answer would be a massive infusion of federal funds—although $100 million does seem rather small when there is a potential audience of over 200,000 manufacturing corporations alone in this country. Nevertheless, rather than proposing massive federal subsidies, we would suggest that basic, non-monetary changes in federal programs which directly address specific inhibitions to both direct small business exporters as well as more general needs of exporter/supplier relationshps, would be more effective in the long-run.

The greatest constraint on direct small business participation in export markets is the limited resources which a small firm can devote to developing sales in an

unfamiliar and risky foreign area. The small businessmen must pledge his relatively scarce resources and personnel to the effort, formulate long and short-term production strategy to cover export contingencies and fundamentally alter the firm's long-range growth picture to include overseas market factors. These same factors hold, although perhaps to a reduced extent, if the small businessman is supplying a contract to a larger exporter and thereby faces the same uncertainties, albeit indirectly. A smaller firm will always face some added costs and risk when it first seeks to enter or expand sales in overseas markets. Unfortunately, however, the U.S. Government has added greatly to both the costs and the uncertainty which a small business exporter must face. Many of the topical areas I have discussed already—regulations, reorganization, export credit, etc.—usually are thought of in relation to large corporate operations. In reality, these self-imposed U.S. government restrictions impact disproportionately on the small businessman.

For example, a small businessman evaluating whether or not to enter the export market usually will not have the administrative personnel to comply with governmental regulatory red tape. He will not have a battery of corporate lawyers to read, understand, and ensure compliance with the exceedingly complex requirements and reporting forms concerning boycott regulations in the Middle East. Nor does he have the cash flow to tie up in developing overseas export contracts which are likely to get delayed in Commerce Department licensing procedures, State Department human rights reviews or Eximbank foreign environmental evaluations. When a small businessman comes to Washington for assistance, he can easily spend a week visiting two dozen different offices, all of which have some role in his export sale. And while the government is exhorting this small businessman to devote the necessary personnel and financial resources to find a foreign buyer, make the sale, alter production runs, expand plant capacity, and process the paperwork to get the export sale approved, that same government too often reneges on its own commitment to help him—for example by recommending the elimination of DISC, one of the few export incentive programs which can help provide the cash flow necessary to sustain a company's export drive.

The most effective encouragement for small business export expansion, both for direct export involvement and an expansion of supplier/exporter ties, would come from federal government efforts to: (1) back its verbal commitment to priority treatment for export expansion with reinforcing programmatic actions—starting with a firm commitment to retention of the DISC program which would give small businesses the confidence to make sales plans based on the program's use: (2) reduce processing redtape and delays, particularly with boycott regulations, export licensing, and Administrative reviews of export transactions for non-economic reasons; and (3) a general consolidation of the scattered and diverse government offices involved in export promotion or assistance, perhaps into one department better able to provide integrated and constructive assistance to U.S. companies in international markets. While some programs can be constructed with a special focus on encouraging small business exports, in the longer-run these three administrative steps to reduce governmental restraints on all exporters, and particularly those which disproportionately impact a small firm's limited resources, will be the most effective stimulant to small business exports.

Export Council

The Administration is proposing to establish a restructured Export Council to include members of Congress, the business community and labor. NAM supports this proposed expansion of the Council to demonstrate the broad-based national commitment to and support for a priority national export expansion program. We would urge, however, that the Council's full potential be exploited rather than, as occurred at times in the past, relegating the Export Council to the role of a figure-head organization. In particular, the Council's mandate should encompass authority to (1) establish goals and monitoring procedures to assure that export expansion objectives are achieved in an effective and timely fashion, and (2) undertake substantive exploration of basic longer-run issues such as taxation, techniques for dealing with state trading corporations, or other serious export-related questions which require a thorough examination in light of long-term national export objectives.

CONCLUSION

The President's announcement of a new national priority for export expansion objective is both appropriate and timely. Improved export performance is essential to help correct the country's record trade imbalance, strengthen the dollar, and contribute to further productive economic growth. NAM believes that all

segments of the American economy should work together toward the national export expansion goals outlined in the President's statement.

However, we would caution that prompt follow-up actions by the Administration are necessary to eliminate contradictions in the program—particularly the inadvisable phase-out of the DISC program—and to carry out effectively other program elements. There must be a forceful demonstration in practical terms that the announced altered priorities are in fact being translated into concrete measures of reduced regulatory restrictions and the achievement of real constraints on the various forms of government intervention under negotiation in the Geneva trade talks.

Finally, attention must be paid to the longer-term, fundamental problems U.S. capital formation needs and increased productivity. NAM will be offering more detailed comments and suggestions regarding both the short and long-range aspects of this multi-faced program. The successful pursuit of a substantive export expansion program is an integral part of the economic policy objectives this nation must set to maintain a healthy domestic economy and retain a competitive international economic position.

TABLE 1.—U.S. EXPORTS, 1977 (FAS)

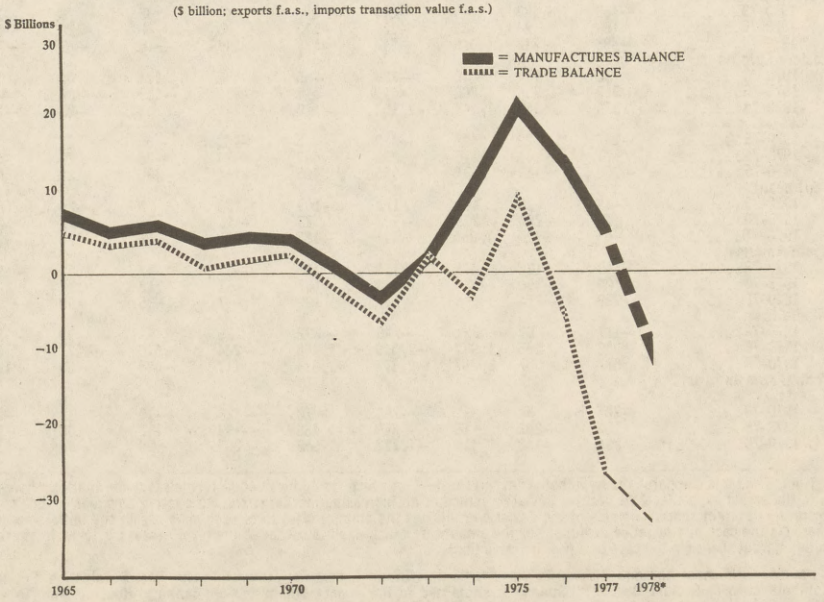
SITC category	Value (billions)	Percent of total
Total	$120.2	100
Manufactured Goods	82.0	68
Chemicals	(10.8)	(9)
Manufactured goods classified by material	(11.3)	(9)
Machinery and transport	(51.0)	(42)
Miscellaneous manufactured articles	(7.3)	(6)
Food and live animals	14.1	12
Crude materials, except fuel, inedible	12.8	11
Mineral fuels, lubricants, and related material	4.2	3
Beverages and tobacco	1.8	1
Animal and vegetable oils, fats, and waxes	1.3	1
Other (military, low value shipments, goods for charity)	3.2	3

Source: Commerce Department, FT–990.

GRAPH 1

U.S. TOTAL TRADE BALANCE AND TRADE BALANCE IN MANUFACTURED GOODS, 1965-1978*

($ billion; exports f.a.s., imports transaction value f.a.s.)



*January–June, seasonally adjusted, annual rate.

Source: Commerce Department, International Economic Indicator, FT 900.

TABLE 2.—UNITED STATES, GERMAN, AND JAPANESE MARKET SHARES[1] FOR MAJOR CAPITAL GOODS, 1964 AND 1976 (PERCENTAGE OF TOTAL)

	1964	1970	1973	1976
United States	30	28	24	23
West Germany	19	18	21	19
Japan	11	9	12	13

[1] Share of total OECD exports.

Note: "Major capital goods" comprise SITC 711, 712, 714, 715, 717, 718, 719.1, 719.2, 719.3, 722, 723, 734, 734.

Source: OECD, Statistics of Foreign Trade.

TABLE 3.—DEVIATIONS FROM CONSTANT-SHARE NORMS FOR MANUFACTURING EXPORTS, BY TRADING PARTNERS: 1970–73, 1973–76, AND 1970–76

[In millions of dollars]

Partner, period	United States	Germany	Japan	United Kingdom	France	Italy	Belgium-Luxembourg	Netherlands	Canada
United States:									
1970–73		475	−7	296	132	−209	168	84	−1,325
1973–76		−2,356	2,945	−614	177	−120	−555	−163	928
1970–76		−1,663	2,996	−219	364	−386	−323	−24	−1,003
Canada:									
1970–73	46	29	11	−149	37	1	23	−26	
1973–76	582	−103	55	−387	−42	11	−34	−37	
1970–76	649	−59	74	−609	14	12	0	−76	
Japan:									
1970–73	−157	121		−31	89	51	32	4	−76
1973–76	88	−152		−66	−32	1	−65	−18	−11
1970–76	−97	−19		−105	68	59	−32	−15	−91
Australia, New Zealand, South Africa:									
1970–73	−36	237	560	−361	−20	15	47	−4	−152
1973–76	340	−333	311	−720	106	−91	−21	−60	50
1970–76	261	41	1,189	−1,293	70	−69	46	−68	−175
EEC–9:									
1970–73	−3,902	1,943	1,006	−670	1,180	−612	549	850	−941
1973–76	−108	−1,733	732	1,050	−835	988	−541	−940	−305
1970–76	−6,205	1,141	2,224	53	948	37	338	375	−1,676
Other developed, Europe:									
1970–73	−550	304	204	−192	181	−71	16	198	−34
1973–76	188	−399	330	−302	−143	167	41	−177	−13
1970–76	−625	61	635	−623	133	60	72	118	−62
Developing, Europe:									
1970–73	−462	129	−9	−293	209	40	35	78	−39
1973–76	169	24	333	−125	−122	80	−68	−128	−13
1970–76	−498	212	318	−547	179	140	−16	−13	−71
Eastern Europe:									
1970–73	36	1,154	−40	−386	−55	−480	114	62	−12
1973–76	310	−1,236	1,202	−411	111	−389	−152	−132	−1
1970–76	379	846	1,144	−1,102	5	−1,244	51	−23	−24
Africa:									
1970–73	−237	122	428	−422	5	−68	−55	27	6
1973–76	171	−41	−176	230	407	14	−26	79	43
1970–76	−268	183	636	−555	403	−114	−130	125	53
Caribbean:									
1970–73	−43	76	450	−173	−109	−123	5	−26	−68
1973–76	19	−260	229	−108	23	−45	−28	−72	22
1970–76	−65	−127	1,055	−416	−182	−263	−26	−123	−94
South America:									
1970–73	−559	126	479	−119	139	−37	47	57	−191
1973–76	704	−496	18	−113	−137	51	−112	−193	222
1970–76	−239	−274	796	−317	120	−7	−35	−98	−96
Middle East:									
1970–73	−117	92	391	−248	−392	125	51	37	35
1973–76	1,058	255	1,977	−1,319	−1,468	−244	−570	−167	59
1970–76	677	587	3,267	−2,171	−2,624	117	−464	−65	185
Central Asia and Far East:									
1970–73	−287	54	931	−298	70	−128	−19	12	−94
1973–76	164	−203	−10	−649	439	−93	118	−108	−27
1970–76	−234	−142	1,418	−1,122	548	−299	90	−94	−177

Note: The table compares the hypothetical export level—that which would be needed to maintain the market share—with the actual export level. A positive deviation indicates an increasing market share. A negative deviation indicates a decreasing market share. The size of the deviation indicates the amount of exports needed to regain the initial market share (in the case of a negative deviation) or the amount by which exports exceeded the level necessary to maintain the initial market share (in the case of a positive deviation).

Source: C. Michael Aho and Richard D. Carney, "United States Export Performance in the Post-Devaluation Period: Continuation of a Secular Decline?" Statement submitted to the Senate Committee on Banking, Housing, and Urban Affairs, Subcommittee on International Finance, Fed. 23, 1978, p. 14A.

TABLE 4.—RELATIVE IMPORTANCE OF SELECTED DEVELOPING COUNTRIES IN U.S. TRADE, 1970 AND 1977

	1970	1977
A. Brazil, Hong Kong, Mexico, Singapore, South Korea, and Taiwan—Share (percent) of U.S. imports of:		
All goods	9.6	11.8
Manufactured goods (SITC 5–8)	8.6	16.2
Chemicals (SITC 5)	2.8	3.7
Manufactured goods by material (SITC 6)	5.1	10.3
Machine and transportation (SITC 7)	4.8	10.9
Miscellaneous manufactured articles (SITC 8)	25.6	41.8
B. Brazil, Hong Kong, Mexico, Singapore, South Korea, and Taiwan—Share (percent) of U.S. exports of:		
All goods	10.1	11.4
Manufactured goods (SITC 5–8)	9.5	11.2
Chemicals (SITC 5)	11.4	16.4
Manufactured goods by material (SITC 6)	8.6	9.5
Machine and transportation (SITC) 7	9.5	10.7
Miscellaneous manufactured articles (SITC 8)	9.8	9.5

Source: Commerce Department, FT–155, FT–455.

The CHAIRMAN. That concludes the hearings for this morning.
[Whereupon, at 1 p.m., the hearing was adjourned.]

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

STATEMENT BY THE PRESIDENT—SEPTEMBER 26, 1978

It is important for this Nation's economic vitality that both the private sector and the Federal government place a higher priority on exports. I am today announcing a series of measures that evidences my Administration's strong commitment to do so.

The large trade deficits the United States has experienced in recent years have weakened the value of the dollar, intensified inflationary pressures in our own economy, and heightened instability in the world economy. These trade deficits have been caused by a number of factors. A major cause has been our excessive reliance on imported oil. We can reduce that reliance through the passage of sound energy legislation this year. Another factor is that the United States economy has been growing at a stronger pace in recent years than the economies of our major trading partners. That has enabled us to purchase relatively more foreign goods while our trading partners have not been able to buy as much of our exports. We will begin to correct this imbalance as our trading partners meet the commitments to economic expansion they made at the Bonn Summit.

The relatively slow growth of American exports has also been an important factor in our trade deficit problem. Over the past 20 years, our exports have grown at only half the rate of other industrial nations and the United States has been losing its share of world markets. Until now, both business and government have accorded exports a relatively low priority. These priorities must be changed.

The measures I am announcing today consist of actions this administration has taken and will take to:

(1) Provide increased direct assistance to United States exporters;

(2) reduce domestic barriers to exports; and

(3) Reduce foreign barriers to our exports and secure a fairer international trading system for all exporters.

These actions are in furtherance of the commitment I made at the Bonn Summit to an improved United States export performance.

DIRECT ASSISTANCE TO UNITED STATES EXPORTERS

1. *Export-Import Bank.*—I have consistently supported a more effective and aggressive Export-Import Bank. During the past two years, my Administration has increased Eximbank's loan authorization fivefold—from $700 million in fiscal year 1977 to $3.6 billion for fiscal year 1979. I intend to ask Congress for an additional $500 million in fiscal year 1980, bringing Eximbank's total loan authorization to $4.1 billion. These authorizations will provide the Bank with the funds necessary to improve its competitiveness, in a manner consistent with our international obligations, through increased flexibility in the areas of interest rates, length of loans, and the percentage of a transaction it can finance. The Bank is also moving to simplify its fee schedules and to make its programs more accessible to smaller exporters and to agricultural exporters.

2. *SBA loans to small exporters.*—The Small Business Administration will channel up to $100 million of its current authorization for loan guarantees to small business exporters to provide seed money for their entry into foreign markets. Small exporting firms meeting SBA's qualifications will be eligible for loan guarantees totalling up to $500,000 to meet needs for expanded production capacity and to ease cash flow problems involving overseas sales or initial marketing expenses.

3. *Export development programs.*—I am directing the Office of Management and Budget to allocate an additional $20 million in annual resources for export development programs of the Departments of Commerce and State to assist

United States firms, particularly small and medium-sized businesses, in marketing abroad through:

A computerized information system to provide exporters with prompt access to international marketing opportunities abroad and to expose American products to foreign buyers;

Risk sharing programs to help associations and small companies meet initial export marketing costs; and

Targeted assistance to firms and industries with high export potential and intensified short-term export campaigns in promising markets.

4. *Agricultural exports.*—Agricultural exports are a vital component of the U.S. trade balance. Over the past 10 years, the volume of U.S. farm exports has doubled and the dollar value has nearly quadrupled. Trade in agricultural products will contribute a net surplus of almost $13 billion in fiscal year 1978. This strong performance is due in part to this Administration's multifaceted agricultural export policy, which will be strengthened and which includes:

An increase of almost $1 billion (up from $750 million in fiscal year 1977 to $1.7 billion in fiscal year 1978) in the level of short-term export credits.

An increase of almost 20 percent in the level of funding support for a highly successful program of cooperation with over 60 agricultural commodity associations in market development.

Efforts in the Multilateral Trade Negotiations to link the treatment of agricultural and nonagricultural products.

Opening trade offices in key importing nations in order to facilitate the development of these markets.

Aggressive pursuit of an international wheat agreement, to ensure our producers a fair share of the expanding world market.

Support of legislation to provide intermediate export credit for selective agricultural exports.

5. *Tax measures.*—I am hopeful that Congress will work with the Administration to promptly resolve the tax problems of Americans employed abroad, many of whom are directly involved in export efforts. Last February, I proposed tax relief for these citizens amounting to about $250 million a year. I think this proposal, which Congress has not approved, deals fairly and, during a time of great budget stringency, responsibly with this problem. I remain ready to work with the Congress to resolve this issue, but I cannot support proposals which run contrary to our strong concerns for budget prudence and tax equity.

My Administration's concern for exports is matched by our obligation to ensure that government-sponsored export incentives constitute an efficient use of the taxpayers' money. The DISC tax provision simply does not meet that basic test. It is a costly (over $1 billion a year) and inefficient incentive for exports. I continue to urge Congress to phase DISC out or at least make it simplier, less costly, and more effective than it is now, and my Administration stands ready to work with Congress toward that goal.

REDUCTION OF DOMESTIC BARRIERS TO EXPORTS

Direct financial and technical assistance to United States firms should encourage them to take advantage of the increasing competitiveness of our goods in international markets. Equally important will be the reduction of government-imposed disincentives and barriers which unnecessarily inhibit our firms from selling abroad. We can and will continue to administer the laws and policies affecting the international business community firmly and fairly, but we can also discharge that responsibility with a greater sensitivity to the importance of exports than has been the case in the past.

1. *Export consequences of regulations.*—I am directing the heads of all Executive departments and agencies to take into account and weigh as a factor, the possible adverse effects on our trade balance of their major administrative and regulatory actions that have significant export consequences. They will report back on their progress in identifying and reducing such negative export effects where possible, consistent with other legal and policy obligations. I will make a similar request of the independent regulatory agencies. In addition, the Council of Economic Advisers will consider export consequences as part of the Administration's Regulatory Analysis Program.

There may be areas, such as the export of products which pose serious health and safety risks, where new regulations are warranted. But through the steps outlined above, I intend to inject a greater awareness throughout the government of the effects on exports of administrative and regulatory actions.

2. *Export controls for foreign policy purposes.*—I am directing the Departments of Commerce, State, Defense, and Agriculture to take export consequences fully into account when considering the use of export controls for foreign policy purposes. Weight will be given to whether the goods in question are also available from countries other than the United States.

3. *Foreign Corrupt Practices Act.*—At my direction, the Justice Department will provide guidance to the business community concerning its enforcement priorities under the recently enacted foreign antibribery statute. This statute should not be viewed as an impediment to the conduct of legitimate business activities abroad. I am hopeful that American business will not forego legitimate export opportunities because of uncertainty about the application of this statute. The guidance provided by the Justice Department should be helpful in that regard.

4. *Antitrust laws.*—There are instances in which joint ventures and other kinds of cooperative arrangements between American firms are necessary or desirable to improve our export performance. The Justice Department has advised that most such foreign joint ventures would not violate our antitrust laws, and in many instances would actually strengthen competition. This is especially true for one-time joint ventures created to participate in a single activity, such as a large construction project. In fact, no such joint conduct has been challenged under the antitrust laws in over 20 years.

Nevertheless, many businessmen apparently are uncertain on this point, and this uncertainty can be a disincentive to exports. I have, therefore, instructed the Justice Department, in conjunction with the Commerce Department, to clarify and explain the scope of the antitrust laws in this area, with special emphasis on the kinds of joint ventures that are unlikely to raise antitrust problems.

I have also instructed the Justice Department to give expedited treatment to requests by business firms for guidance on international antitrust issues under the Department's Business Review Program. Finally, I will appoint a business advisory panel to work with the National Commission for the Review of the Antitrust Laws.

5. *Environmental reviews.*—For a number of years the export community has faced the uncertainty of whether the National Environmental Policy Act (NEPA) requires environmental impact statements for Federal export licenses, permits and approvals.

I will shortly sign an Executive Order which should assist U.S. exports by eliminating the present uncertainties concerning the type of environment reviews that will be applicable and the Federal actions relating to exports that will be affected. The Order will make the following export-related clarifications:

Environmental Impact Statements will not be required for Federal export licenses, permits, approvals, and other export-related actions that have potential environmental effects in foreign countries.

Export licenses issued by the Departments of Commerce and Treasury will be exempt from any environmental reviews required by the Executive Order.

Abbreviated environmental reviews will be required only with respect to (1) nuclear reactors, (2) financing of products and facilities whose toxic effects create serious public health risks, and (3) certain Federal actions having a significant adverse effect on the environment of non-participating third countries or natural resources of global importance.

Accordingly, this Order will establish environmental requirements for only a minor fraction (well below 5%) of the dollar volume of United States exports. At the same time, it will provide procedures to define and focus on those exports which should receive special scrutiny because of their major environmental impacts abroad. This Executive Order will fairly balance our concern for the environment with our interest in promoting exports.

REDUCTION IN FOREIGN TRADE BARRIERS AND SUBSIDIES

We are also taking important international initiatives to improve U.S. export performance. Trade restrictions imposed by other countries inhibit our ability to export. Tariff and especially non-tariff barriers restrict our ability to develop new foreign markets and expand existing ones. We are now working to eliminate or reduce these barriers through the Multilateral Trade Negotiations in Geneva.

United States export performance is also adversely affected by the excessive financial credits and subsidies which some of our trading partners offer to their own exporters. One of our major objectives in the MTN is to negotiate an inter-

national code restricting the use of government subsidies for exports. In addition, I am directing the Secretary of the Treasury to undertake immediate consultations with our trading partners to expand the scope and tighten the terms of the existing International Arrangement on Export Credits.

I hope that our major trading partners will see the importance of reaching more widespread agreements on the use of export finance, to avoid a costly competition which is economically unsound and ultimately self-defeating for all of us. These international agreements are essential to assure that American exporters do not face unfair competition, and this Administration intends to work vigorously to secure them.

CONCLUSION

While these initiatives will assist private business in increasing exports, our export problem has been building for many years and we cannot expect dramatic improvement overnight. Increasing our exports will take time, and require a sustained effort. Announcement of my Administration's export policy is not the end of our task, but rather the beginning. To insure that this issue continues to receive priority attention, I am asking Secretary Kreps, in coordination with officials from other concerned government agencies, to direct the continuation of efforts to improve our export potential and performance.

I will shortly sign an Executive order to reconstitute a more broadly-based President's Export Council to bring a continuous flow of fresh ideas into our government policymaking process. I expect this Council to report to me annually through the Secretary of Commerce.

Increasing U.S. exports is a major challenge—for business, for labor, and for government. Better export performance by the United States would spur growth in the economy. It would create jobs. It would strengthen the dollar and fight inflation.

There are no short-term, easy solutions. But the actions I am announcing today reflect my Administration's determination to give the United States trade deficit the high-level, sustained attention it deserves. They are the first step in a long-term effort to strengthen this Nation's export position in world trade.

Chart I
Page 1

TAX INCENTIVES FOR EXPORTS

	AUSTRIA	PORTUGAL	AUSTRALIA	NEW ZEALAND	JAPAN	CANADA
Taxation of foreign branch income	Fully taxed at usual rate (progressive rates from 30% to 55%). Deduction for foreign taxes paid. Foreign tax credit upon application.	Exemption of 2/3 of income (effective tax rate of 17.4%).	Exempt except if has not been taxed abroad (tax rates from 47.5% to 50%).	Fully taxed at usual rate (tax rates are from 20% to 45%). Foreign tax credit.	Taxable at usual rate (effective tax rate of 52%). Favorable foreign tax credit system.	Fully taxable at usual rate (46%). Foreign tax credit.
Taxation of foreign subsidiaries	None. No subpart F income equivalent.	None. No subpart F income equivalent.	None. No subpart F income equivalent.	None. No subpart F income equivalent.	None. No subpart F income equivalent.	Yes, but under conditions less stringent than under subpart F income.
Deductibility of foreign branch losses	Fully deductible.	Fully deductible.	Fully deductible.	Fully deductible.	Fully deductible.	Fully deductible.
Taxation of foreign source dividends	Exempt if at least 25% control.	Exempt if at least 25% control. One-third taxable in other cases.	Exempt in practice.	Exempt.	Fully taxed at usual rate. Direct and deemed paid foreign tax credit.	Exempt when foreign subsidiary is controlled (50%). Partial exemption from 1976. Foreign tax credit.
Special deferrals of taxable domestic income	Investment reserves.	None.		None.	Income may be deferred for: --overseas market development --overseas investment losses --foreign exchange losses	None.
Specific export tax incentives	10% write-off with respect to acquisition of shares in certain foreign entities. Custom free zones.	None.	Deductions and rebates for export market development expenses.	Deduction of 150% of the cost of export related expenditures. Deduction of an amount related to increased export sales.	--Reserves for overseas market development--Deduction of overseas investments. --Reserves for foreign exchange losses. --Special deductions for certain overseas transactions.	None.
Intercompany pricing rules					Favorable treatment for exporting companies.	
Border tax adjustments (VAT)	VAT (rate 18%) zero rate on exports.	None.	None.	None.	None.	None.
Tax incentives indirectly benefiting exports	Accelerated depreciation or tax-exempt investment reserve (1)	Reduced tax rate or exemption from taxation for introduction of new products or processes. Accelerated depreciation.	None.		None.	Tax reduction for manufacturing income. Accelerated depreciation. (1) Investment tax credit.

(1) Most of the tax incentives are granted in connection with industrial and regional development.

[The following information was referred to on p. 55 :]

TAX INCENTIVES FOR EXPORTS

	BELGIUM	FRANCE	GERMANY	ITALY	LUXEMBOURG	NETHERLANDS
Taxation of foreign branch income	1/4 the usual rate (48%).	Exempt (1) (corporate tax rate is 50%)	Normal tax rate (51%) plus foreign tax credit or, in certain cases, imposition of a flat 25% tax rate.	Taxed at usual rate (35%). Foreign tax credit.	Exemption on 50% of income (progressive tax rate from 20% to 40%). Foreign taxes deductible.	Taxed at usual rate. Favorable foreign tax credit system.
Taxation of foreign subsidiaries	None. No subpart F income equivalent.	None except if election is made. No subpart F income equivalent.	Yes, but under conditions less stringent than the U.S. subpart F provision.	None. No subpart F income equivalent.	None. No subpart F income equivalent.	None. No subpart F income equivalent.
Deductibility of foreign branch losses	Fully deductible even though foreign income is exempt under tax treaty.	Not deductible. (2)	Fully deductible even though foreign income is exempt under tax treaty. (3)	Fully deductible.		Fully deductible.
Taxation of foreign source dividends	Permanent participation (held for more than one year): 85% exclusion plus 5% tax credit. Non permanent participation: 15% tax credit.	95% exclusion if French company owns 10% or more of the stock.	Fully taxed at usual rate. Foreign tax credit and deemed paid foreign tax credit under certain circumstances.	Fully taxed at usual rate. Foreign tax credit.	50% exclusion if at least 25% control. Total exemption for holding companies. Foreign taxes deductible.	Exempt in majority of cases.
Special deferrals of taxable domestic income	None.	Income may be deferred for:--losses of certain foreign business--cost of investment in certain business in LDCs--export credit extended to foreign buyer.	Income may be deferred for:--losses of foreign branches whose income is tax exempt--losses of foreign subsidiaries --profits realized upon an exchange of property for stock of a foreign corporation.		None.	None.
Specific export tax incentives	None.	--Joint export programs--Election to compute income on a worldwide basis--All special deferrals--Exclusion from the "inflation levy".	None.		None.	Tax credit for withholding tax on interest and royalties paid by residents in certain non-treaty LDCs.
Intercompany pricing rules	Will provide assurances on allocation in certain cases. Historically generous to exporters.	As a general rule, not enforced against exporters.	Usually enforced although relaxation may be granted in special circumstances.			Usually enforced but special agreement used, may be negotiated with the tax authorities.
Border Tax adjustments (VAT)	VAT (18% rate) up to 25% for luxury items. Zero rate on exports.	VAT (20% rate) up to 33% for luxury items. Zero rate on exports.	VAT (11% rate). Zero rate on exports.	VAT (12% up to 30% for luxury items). Zero rate on exports.	VAT (rate 10%). Zero rate on exports.	VAT (18% rate). Zero rate on exports.
Tax incentives indirectly benefiting exports	--accelerated depreciation --exemption from real estate tax --reduced income tax rate on certain reinvested profits (4)	--accelerated depreciation --exemption from local business tax --reduction of registration taxes (4)	--accelerated depreciation --reduction of corporate tax rate and VAT rates (4)	Tax exemption or reduction for financial or government owned companies (4)	Investment credit from 3% to 9% of cost of certain capital assets.	Accelerated depreciation (4) Investment tax credit from 8% to 16% of cost of certain capital assets.

(1) Foreign branch income is taxable at usual rate if the French company elects to be taxed on a worldwide or consolidated basis.
(2) Losses of foreign branches are deductible when the domestic company elects to be taxed on a worldwide or consolidated basis.
(3) When the income has not been taxed abroad, the amount deducted for foreign losses must be put back into income after a number of years.
(4) Most of the tax incentives are granted in connection with industrial and regional development.

TAX INCENTIVES FOR EXPORTS

	U.K.	IRELAND	DENMARK	NORWAY	SWEDEN	UNITED STATES
Taxation of foreign branch income	Taxable at usual rate (52%). Foreign tax credit.	Taxable at usual rate. (Average rate 50%). Deduction for foreign taxes paid.	Taxed at half the usual rate (1/2 of 37%). Foreign tax credit.	Exemption on 50% of income (rate is 26.5%).	Taxed at usual rate (effective income tax rate is 54%). Foreign tax credit.	Fully taxable at usual rate (48%). Foreign tax credit.
Taxation of foreign subsidiaries	None. No subpart F income equivalent.	None. No subpart F income equivalent.	None. No subpart F income equivalent.	None. No subpart F income equivalent.	None. No subpart F income equivalent.	Yes, under subpart F provisions.
Deductibility of foreign branch losses	Fully deductible. Deductible against foreign source business income only when carried over to following years.	Fully deductible.	Fully deductible.		Fully deductible.	Fully deductible.
Taxation of foreign source dividends	Fully taxed at usual rate. Direct and deemed paid foreign tax credit.	Fully taxed at usual rate.	Fully taxed at usual rate. Deemed paid foreign tax credit.	Half-exempt if at least 95% control.	Fully taxed at usual rate. Foreign tax credit.	Fully taxed at usual rate. Direct and deemed paid foreign tax credit.
Special deferrals of taxable domestic income	None.		None.	Tax free reserves deductible.		About 25% of taxable income may be deferred under the DISC provisions.
Specific export tax incentives	Deduction of business entertainment expenses connected with export activities.	Exemption from corporate taxes on profits attributable to exports of goods produced in Ireland.		Tax free reserves deductible.	Additional deduction for interest charged on export credit.	None, aside from DISC.
Intercompany pricing rules	Not actively used.				Not actively used.	Strictly enforced, including against export industry. Important cases against exporters pending.
Border tax adjustments (VAT)	VAT (8% rate up to 25% for luxury items). Zero rate on exports.	VAT (19.5% up to 36.5% for luxury items). Zero rate on exports.	VAT (15% rate). Zero rate on exports.	VAT (20% rate). Zero rate on exports.	None.	None at Federal level.
Tax incentives indirectly benefiting exports	Favorable rates of depreciation. (1)	Accelerated depreciation. (1)	Tax-free investment reserves constituted by 20% of annual profits. Dissolved after 10 years. (1)	Accelerated depreciation. Tax-free reserves deductible. (1)	Accelerated depreciation. (1)	Accelerated depreciation. Investment tax credit (10%).

(1) Most of the tax incentives are granted in connection with industrial and regional development.

NONTAX INCENTIVES FOR EXPORTS

	AUSTRIA	PORTUGAL	AUSTRALIA	NEW ZEALAND	JAPAN	CANADA
Nontax incentives indirectly benefiting exports	Investment allowances (1)		None.			Cash grants. (1)
Financing assistance	Guarantees for medium-term credits. Rate of interest is 7%.				Direct loans for medium-term sales. Long-term credits at preferential rates (from 7.5% to 8.75%). Financing of contract value from 48% to 64%. Mixed credits.	
Insurance assistance					Are insured: --production risks --commercial risks --political risks --currency fluctuations --loss of foreign investment. Risks are covered from 60% to 80%.	

(1) Most of the nontax incentives are granted in connection with industrial and regional development.

NONTAX INCENTIVES FOR EXPORTS

	BELGIUM	FRANCE	GERMANY	ITALY	LUXEMBOURG	NETHERLANDS
Nontax incentives indirectly benefiting exports	--Interest subsidies --Investment subsidies (1)	--Grants --Investment subsidies (1)	Grants (1)	--Capital grants --Long and medium term loans by specialized government institutions (1)	--Grants --Loans --Guarantees (1)	--Investment subsidies --Interest subsidies (1)
Financing assistance	Discount at low rates. Interest rebates on export credit. Subsidized medium term export financing. Average rate borne by exporters is 9%. Financing of up to 90% of contract value.	Discount at low rates. Long-term loans at 7.5% rate, to both suppliers or buyers. Financing of up to 100% of contract value. Mixed credits.	Discount at low rates. Guarantees. Long-term credits to both suppliers or buyers. Preferential rates of 10%. Financing of up to 80% of contract value. Mixed credits.	Discount at low rates. Interest subsidies. Long-term loans at 8.95% rate to both suppliers and buyers. Financing of up to 100% of contract value.		Discount at low rates. Guarantees. Subsidized medium and long-term export credits. Average interest rate borne by exporters is 9.5%. Financing of up to 90% of contract value.
Insurance assistance	Are insured: --commercial risks --political risks --currency fluctuations Risks covered from 80% to 100%.	Are insured: --production risks --commercial risks --political risks --currency fluctuations --market development --exhibition expenses --inflation risks Risks are covered from 80% to 100%.	Are insured: --production risks --commercial risks --political risks --currency fluctuations --inflation risks Risks are covered from 80% to 100%.	Are insured: --commercial risks --political risks --currency fluctuations --inflation risks Risks are 90% covered.		Are insured: --commercial risks --political risks --currency fluctuations Insurance usually covers from 75% to 100% of the risks.

(1) Most of the nontax incentives are granted in connection with industrial and regional development. In Belgium, interest subsidies are granted for the purpose of investment throughout the country and not only in depressed areas.

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NONTAX INCENTIVES FOR EXPORTS

	U.K.	IRELAND	DENMARK	NORWAY	SWEDEN	UNITED STATES
Nontax incentives indirectly benefiting exports	--Grants --Investment subsidies --Interest subsidies (1) --Employment subsidies (2)	--Investment allowances --Training grants --Loan guarantees (1)	--Loans --Cash grants (1)		--Investment allowances --Loan guarantees (1)	None, except limited agricultural subsidies.
Financing assistance	Guarantees. Interest rate subsidies. Portfolio refinancing. Support granted on a supplier and buyer basis. Interest rate borne by borrowers: 7.8%. Financing of up to 100% of contract value. Mixed credits.	Guarantees. Medium-term loans at preferential rates (8%). Financing of up to 80% of contract value.	Guarantees. Financing of up to 90% of contract value. Interest rate is 8.5% after first year.		Medium and long-term financing at 2% or 3% above discount rate. Financing of up to 100% of contract value.	Discount at medium rates. Guarantees. Long-term export credit financing at interest rates from 8.25% to 9.5%. No mixed credits. Financing of 30% to 55% of contract value.
Insurance assistance	Are insured: --commercial risks --political risks --production risks --inflation risks --currency fluctuations --performance bonds Risks are covered up to 100%.	Are insured: --production risks --commercial risks --political risks --currency fluctuations Risks are covered up to 100%.	Are insured: --commercial risks --political risks --currency fluctuations Risks are covered from 65% to 90%.		Are insured: --commercial risks --political risks --currency fluctuations --inflation risks Risks are covered up to 90%.	Are insured: --commercial risks --exhibition expenses --political risks Risks are covered up to 95%.

(1) Most of the nontax incentives are granted in connection with industrial and regional development.
(2) Granted in order to encourage employers to retain employees.

[The following information was referred to on p. 53:]

U.S. TRADE DEVELOPMENTS, FIRST HALF 1978

The major negative turnaround in the U.S. trade position which took place in 1977 was highlighted in NAM's special report published in May: "U.S. Trade Performance Since 1970, with Special Reference to Manufactured Goods". The following comments and data have been prepared to provide a quick synopsis of trade developments in the first half of 1978.

For 1978, the United States trade deficit is projected to be $32.8 billion based on seasonally adjusted figures for the first half of the year. The 1978 deficit is thus running at an annual rate which is 25 percent higher than the $26.7 billion deficit for 1977, itself a record figure. Although this may be caused in part by the exceptionally poor trade performance of the first quarter of this year, it seems clear that the 1978 deficit will exceed that of 1977. The 1978 trade deficit is marked by deterioration in almost all sectors, especially in fanufactured goods, which provide about two-thirds of U.S. export earnings. In this sector, the 1978 account is estimated to be in deficit by $10.7 billion, compared with a surplus of $4.8 billion in 1977 and a surplus of $21 billion in 1975. Strong imports of steel, automobile and machinery as well as sluggish exports account for this sizeable 1978 deficit in manufactured goods. Surpluses in the chemicals (SITC 5) and machinery and transport (SITC 7) categories declined, while deficits in manufactured goods classified by material (SITC 6) and miscellaneous manufactures (SITC 8) grew worse.

The balance for agricultural products improved, with the surplus for food and live animals (SITC 0) rising to $4.4 billion after a slump in 1977.

The first half of 1978 showed surprisingly moderate developments in oil imports, with the deficit for petroleum and petroleum products (excluding gas) falling to an annual rate of $37.1 billion from the 1977 deficit of $40.1 billion. U.S. imports declined in volume the first half of 1978, amounting to 8.6 million barrels per day, compared with 9.6 million barrels per day in the first half of 1977 and 9.0 million barrels in the last half.

Thus, the most favorable sector developments occurred in agricultural products and petroleum, while the crucial sector of manufactured goods experienced deterioration in every major category (SITC 5–8), with surpluses shrinking and deficits growing larger.

The figures cited above are not qualitatively evaluated but simply represent full-year projection of the figures for the first six months. Business cycle factors are not taken into account. Exchange rate developments, particularly the decline in the value of the dollar relative to the yen, should play a greater role in the second half. There is evidence of declining volume of imports in real terms of such items as automobiles and steel, for example, but dollar values continue to be higher because of the foreign exchange translation factor. The oil and agricultural figures are obviously subject to developments that are not very much related either to the exchange rate or the business cycle.

Thus, the $32.8 billion trade deficit cited for 1978 is a statistically derived figure and not a prediction. The attached table presents data for 1976 and 1977, with first half 1978 results as well as full year 1978 projections.

U.S. TRADE ACCOUNT

[In billions of dollars, F.A.S.]

	Exports	Imports	Balance
I. Total trade:			
1976	114.8	120.7	−5.9
1977	120.1	145.8	−26.7
1978 (I, annual rate)	123.4	162.1	−38.7
1978 (January-June, annual rate)	132.7	165.5	−32.8
II. Manufactured goods (SITC 5–8):			
1976	78.5	64.8	13.8
1977	82.0	77.2	4.8
1978 (I, annual rate)	82.2	94.8	−12.6
1978 (January-June, annual rate)	86.8	97.5	−10.7
III. Capital goods, excluding Automotive ("end-use" category):			
1976	38.3	10.9	27.4
1977	39.0	13.4	25.7
1978 (January-June, annual rate)	42.7	18.1	24.6

U.S. TRADE ACCOUNT—Continued

[In billions of dollars, F.A.S.]

	Exports	Imports	Balance
IV. Manufactured goods breakdown:			
A. Chemicals (SITC 5):			
1976	10.0	4.8	5.2
1977	10.8	5.4	5.4
1978 (January-June, annual rate)	11.4	6.3	5.1
B. Manufactured goods by material (steel, textiles, paper, etc) (SITC 6):			
1976	11.2	17.6	−6.4
1977	11.3	21.4	−10.1
1978 (January-June, annual rate)	11.6	27.6	−16.0
C. Machinery & Transport (SITC 7):			
1976	49.5	29.8	19.7
1977	51.0	35.5	15.5
1978 (January-June, annual rate)	54.4	45.4	9.0
D. Miscellaneous manufactured articles (SITC 8):			
1976	6.6	12.6	−6.0
1977	7.3	14.9	−7.5
1978 (January-June, annual rate)	9.5	18.1	−8.7
V. Petroleum and Petroleum products, excluding Gas ("end-use" category):			
1976	1.0	[1] 31.8	−30.8
1977	1.3	[1] 41.4	−40.1
1978 (January-June, annual rate)	1.4	[1] 38.5	−37.1
1978 (January-June, annual rate)	1.4	[1] 38.5	−37.1
VI. Food and live animals (SITC 0):			
1976	15.7	10.3	5.4
1977	14.1	12.5	1.6
1978 (January-June, annual rate	17.8	13.4	4.4

[1] Does not include crude petroleum imports into the Virgin Islands.

Source: Commerce Department FT-990, and U.S. Trade Reference Room. Figures for 1978 based on revised SITC statistics.

International Economic Policy

SPECIAL REPORT

U.S. TRADE PERFORMANCE SINCE 1970 WITH SPECIAL REFERENCE TO MANUFACTURED GOODS

Preface

Changes in the U.S. trade picture are important for the U.S. economy. Currently, U.S. exports and imports together equal about 14 percent of our GNP. In recent years, manufactured goods, supplies and equipment have constituted two-thirds of U.S. exports, and over half of U.S. imports. In the past two years, the traditional U.S. trade surplus in manufactured goods has been declining and the first quarter of 1978 shows a deficit of $3 billion.

Recent changes in the U.S. trade account have been difficult to evaluate in view of alteration in our traditional pattern of energy imports, currency changes, and other economic factors. Business cycle developments at home and abroad, inflation, high rates of unemployment and growing intervention by governments to affect trade flows make it necessary to achieve maximum benefits for the U.S. economy from trade.

President Carter has urged that U.S. industry and agriculture expand exports and has directed that a national export expansion program be undertaken. NAM, representing roughly 75 percent of the manufacturing output of the U.S., supports programs to increase exports and will be addressing through its International Economic Affairs Committee various policy aspects of this problem.

This report on U.S. trade has been prepared with particular emphasis on manufactured goods. The purpose of the report is to focus attention on the facts and thereby to facilitate informed discussion of policy alternatives to improve U.S. trade performance.

Lawrence A. Fox,
Vice President,
International Economic Affairs.

Highlights

The U.S. recorded its largest trade deficit in history in 1977—almost $27 billion in contrast with a trade deficit of $6 billion in 1976.

Manufactured goods export growth has been virtually flat for the past 2 years while manufactured goods imports have risen sharply. The first quarter of 1978 showed a deficit in the manufactured goods trade balance, in contrast with a surplus of $21 billion in 1975.

Manufactured goods exports of the Common Market, Germany and Japan to the world (excluding the U.S.) have grown more rapidly than U.S. manufactured goods exports since 1975.

The increase in the oil deficit was about $9 billion, less than half the total increase in the trade deficit from 1967 to 1977.

Agricultural exports totaled $19.6 billion in 1977, but agricultural export growth has been stagnant since 1975.

The U.S. trade balance declined in 1977 with all major areas of the world.

The trade deficit with Japan was $8.1 billion in 1977, in contrast to $5.4 billion in 1976.

The 1977 trade surplus with the Common Market declined by more than $3 billion from the 1976 level.

The U.S. trade balance with Canada—our largest trading partner—declined in 1977 by $1.6 billion.

EXECUTIVE SUMMARY

U.S. trade performance in the past 2 years contrasts with 1975, a year of vigorous export growth and net decline in U.S. imports, with the resulting trade surplus of $11 billion the largest in U.S. history. Just as the 1975 figures reflect world business cycle developments, the declining U.S. trade performance is similarly influenced by the business cycle, but nevertheless it is evident that the U.S. trade balance has been undergoing a secular decline since the mid–1960s. The downturn since 1975 seems to be reestablishing an earlier trend that existed prior to devaluation, floating, and the worldwide economic disturbances of 1973–74. Oil, of course, is a major cause of the growing U.S. deficit, but not the only cause. Most notably, the U.S. trade surplus in manufactured goods declined from a peak of $21 billion. Agricultural exports have been stagnant. Imports have risen across the board.

General Trade Developments, 1976–77

The U.S. trade deficit in 1977 was $26.7 billion, four and one-half times the 1976 level. Exports were sluggish, totaling $120.1 billion, or 4.6 percent above 1976. Imports totaled $146.8 billion, or 21.6 percent above 1976. The annualized first quarter deficit for 1978 was $38.6 billion.

The increase in the oil deficit amounted to slightly less than half of the increase in the total trade deficit from 1976 to 1977. Major elements in the growing deficit other than oil were non-oil industrial supplies and materials, which went from a $2 billion surplus in 1976 to a $2 billion deficit in 1977 consumer goods, whose deficit grew from $11 billion to $14 billion; and capital goods, whose surplus shrank by $2 billion. Petroleum and petroleum products went from a 1976 deficit of $31 billion to a 1977 deficit of $40 billion.

Trade Trends by Commodity, 1970–77

The period since 1970 is sufficiently long to reflect the impact of the devaluation of the dollar, the consequences of floating exchange rates, and the worldwide economic disturbances of 1973–74. By 1975 the United States had largely absorbed the influence of dollar devaluation, but it had scarcely begun to adapt to the great changes wrought since 1973 by the increase in oil prices and the stagflation present throughout most of the world economy.

Imports

The largest non-oil import category is industrial supplies, which constituted one-third of total U.S. imports in 1977. This category grew at an average annual rate of 16 percent from 1970 to 1977. The last 2 years have seen higher-than-average growth rates, with a rate of 17.5 percent for 1977.

The second ranking non-oil import category is consumer goods, accounting for 21 percent of total non-oil imports in 1977. The average annual rate of growth for consumer goods imports from 1970 to 1977 was 17 percent. The U.S. economic recovery since 1975 has produced especially strong import growth, amounting to 34 percent in 1976 and 22 percent in 1977.

Capital goods constituted 13 percent of U.S. non-oil imports in 1977. Capital goods import growth averaged 20 percent per year from 1970 to 1977. Import growth picked up somewhat in 1977 after weak expansion in 1976.

Exports

The rapid deterioration in the non-oil trade account reflects the stagnation in major commercial export sectors combined with buoyant import growth. Taking inflation into account, the two top export categories—capital goods and industrial supplies and materials—which supply almost two-thirds of U.S. sales abroad, experienced negative real growth for 1976–77.

The downturn in the largest export category, capital goods, has received little attention, but if it persists it will entail major structural difficulties for the external account. Capital goods supplied one-third of all U.S. sales in 1977. The average growth rate from 1970 to 1977 was 16 percent per year. Since 1975 growth has come to a virtual standstill, falling to 2 percent in 1977. The second major export group is industrial supplies and materials accounting for 28 percent of total exports in 1977. The growth rate for this group also declined since 1975, falling to 1.0 percent in 1977.

Trade Trends by Area, 1970–77

U.S. trade balances with all major areas except the EC and Communist countries have deteriorated since 1970. In 1977 the U.S. trade surplus with the EC amounted to $4.4 billion and with Communist areas to $1.6 billion. The greatest deficit was with Japan, amounting to $8.1 billion in 1977.

The largest supplier of the U.S. in 1977 was Canada, with $29 billion of merchandise sales, followed by the EC, with $22 billion of sales. The largest U.S. market in 1977 was the EC, absorbing $26 billion of U.S. goods, followed closely by Canada.

The most rapidly growing market area in recent years has been the Middle East. While the U.S. share of the Middle East market has been growing, it has not grown as rapidly as that of Germany or Japan in the period 1970–76.

Developing countries have become major suppliers of manufacturers to the U.S., providing one-quarter of total manufactured goods imported in 1977. Six rapidly industrialized countries* supplied two-thirds of all LDC manufacture exports to the U.S. in 1977. The share of developed countries in the U.S. market has fallen correspondingly, with Western Europe the largest current supplier.

Developing countries now buy 43 percent of U.S. manufactured exports. Developed countries purchase slightly more than half of U.S. exports, with Canada the largest single market. Communist countries remain comparatively unimportant as trade partners in manufactures, accounting for about one percent.

Comparisons in Trade Performance with Major Trading Countries

The United States remains the world's largest exporter and importer. However, in manufactured exports, the United States was overtaken by West Germany in 1970. Germany had 19.1 percent of world manufactured exports in 1976, compared with the U.S. share of 18.3 percent ($79 billion for the United States and $91 billion for Germany). Since 1970 Japan's market share for manufactures has risen rapidly, reaching 14.8 percent in 1976.

U.S.-Japanese trade in manufactures shows the greatest asymmetry of any major area, and the asymmetry has grown since 1970. In 1970, Japan accounted for 21.6 percent of U.S. manufactured imports and 6.6 percent of U.S. manufactured exports. In 1977, the comparable figure had risen to 23.5 percent on the U.S. import side and on the U.S. export side had fallen to 4.6 percent.

Lagging U.S. manufactured goods export performance is in part due to the slow economic growth rates abroad. But this explanation is incomplete. Export growth rates for the Common Market, Germany and Japan to the world excluding the U.S. have exceeded U.S. export rates since 1975. The conjunctural business cycle explanation thus must be supplemented by other analytical approaches.

U.S. Trade Performance Since 1970 With Special Reference to Manufacturers

This examination of the U.S. trade account addresses three major aspects of U.S. trade performance in the 1970s:

I. What has been the overall development of the U.S. trade account? Have there been significant changes in the commodity composition of imports and exports? In import sources and export markets?

II. What is the role of oil in the deterioration of the trade balance?

*Brazil, Hong Kong, Mexico, Singapore, South Korea, and Taiwan.

III. What has been the overall record of U.S. trade performance in manufactured goods? Where have the most important changes in U.S. imports and exports of manufactured goods occurred, both in terms of areas and commodity breakdown?

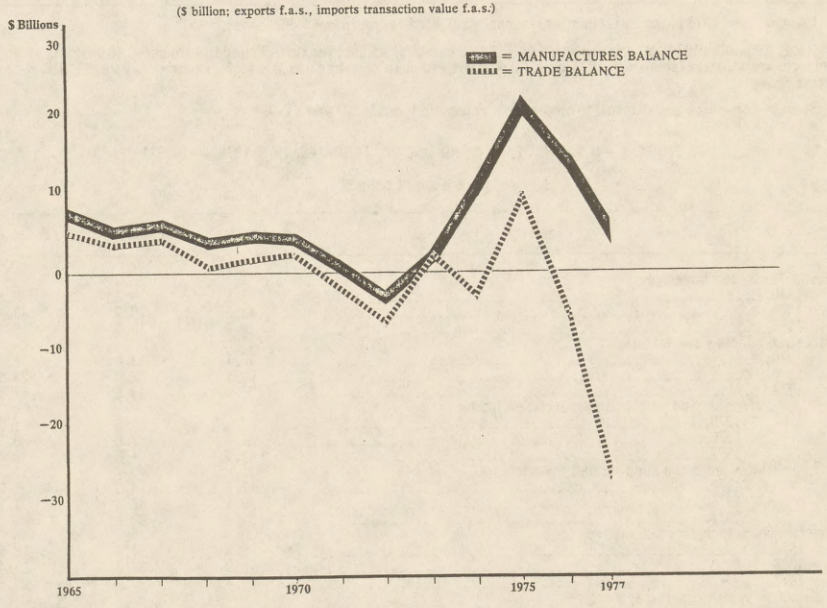
I. GENERAL DEVELOPMENT OF THE TRADE ACCOUNT

U.S. trade performance in the past 2 years contrasts with 1975, a year of vigorous export growth and net decline in U.S. imports. Recent comparisons are bound to show declining performance when measured against a year such as 1975; but, with a longer perspective, it seems clear that the U.S. trade balance has been undergoing a secular decline since the mid-1960s (Graph 1, Table 1). The downturn since 1975 seems to be reestablishing an earlier trend that existed prior to dollar devaluation, floating, and the worldwide economic disturbances of 1973–74.

GRAPH 1

U.S. TOTAL TRADE BALANCE AND TRADE BALANCE IN MANUFACTURED GOODS, 1965-1977

($ billion; exports f.a.s., imports transaction value f.a.s.)



Source: Commerce Department, International Economic Indicators.

The U.S. trade account when broken down by end-use category has deteriorated in every sector since 1976 except for "special category" military goods (Table 2). In addition to petroleum, relatively sharp deterioration has occurred in the trade balances for industrial supplies other than petroleum, automotive vehicles, and consumer goods. The capital goods category experienced a smaller decrease in its positive balance, from $27.4 billion in 1976 to $25.6 billion in 1977.

TABLE 1.—U.S. TRADE, 1970–77

[In billions of dollars]

	Imports	Exports	Balance
Year:			
1970	40.0	42.7	2.7
1971	45.6	43.5	−2.0
1972	55.6	49.2	−6.4
1973	69.5	70.8	1.3
1974	100.3	97.9	−2.3
1975	96.1	107.1	11.0
1976	120.7	114.8	−5.9
1977	146.8	120.1	−26.7
1978 [1]	162.1	123.4	−38.7
1977: [1]			
I	141.6	117.9	−23.7
II	148.6	121.9	−26.7
III	149.4	122.5	−26.8
IV	146.9	118.1	−28.8
1978: I [1]	162.1	123.4	−38.7

[1] Annual rate; 1978 based on 1st quarter seasonally adjusted figures from FT–990 series.

Note: Beginning 1974, imports are based on F.A.S. transaction values; for 1970–73 imports are based on customs values. Imports are also available since 1974 on a C.I.F. basis, although not shown in this table. Exports are valued F.A.S. for all years shown.

Source: Commerce Department, "International Economic Indicators" and FT–990.

TABLE 2.—U.S. TRADE, BY "END-USE" CATEGORIES, 1970, 1976, AND 1977

[In billions of dollars]

	Imports	Exports	Balance
Foods, feeds, and beverages:			
1970	6.2	5.8	−0.4
1976	11.5	19.7	8.2
1977	13.9	19.6	5.7
Industrial supplies and materials:			
1970	15.1	13.8	−1.3
1976	60.9	32.0	−28.9
1977	75.6	33.5	−42.1
Petroleum and petroleum products, excluding gas:			
1970	[1] 2.8	.5	−1.3
1976	[1] 31.8	1.0	−30.8
1977	[1] 41.4	1.3	−40.1
Other industrial supplies and materials:			
1970	12.3	13.3	1.0
1976	29.1	31.0	1.9
1977	34.2	32.2	−2.0
Capital goods, excluding automotive:			
1970	3.8	14.4	10.6
1976	10.9	38.3	27.4
1977	13.4	39.0	25.6
Automotive vehicles, parts, and engines:			
1970	6.0	3.7	−2.3
1976	16.2	11.2	−5.0
1977	18.7	12.1	−6.6
Consumer goods (nonfood), excluding automotive:			
1970	7.6	2.7	−4.9
1976	18.4	7.9	−10.5
1977	22.4	8.8	−13.6

[1] Does not include crude petroleum imports into the Virgin Islands, which totaled $2,600,000,000 in 1977.

Note: 19707 Customs value; 1976 and 1977: FAS.

Source: Commerce Department, FT–990, table E–9, I–5.

The relative contribution of the end-use categories to export performance has not changed much from 1970 to 1977 (Table 3). The greatest decrease occurred in industrial supplies, which accounted for only 27.9 percent of 1977 exports compared to 31.9 percent of 1970 exports. Capital goods barely changed in its relative contribution, supplying 32.4 percent of 1977, an increase of 0.5 percent over 1970. Imports increased across the board in absolute terms. The relative contribution of end-use categories to imports altered significantly from 1970 to 1977 (Table 3). The greatest relative decline in import share was in foods,

feeds, and beverages, from 15.5 percent of total imports in 1970 to 9.5 percent last year. The greatest increase occurred in industrial supplies, which accounted for slightly more than half of all imports in 1977, compared to 37.8 percent in 1970. This is caused, of course, by the increase in volume and value of oil imports. As a percentage of non-oil imports, the industrial supplies category remained stable from 1976 to 1977. Capital goods, on the other hand, increased from 10.2 percent of all U.S. imports in 1970 to 12.7 percent in 1977 (from $3.8 billion in 1970 to $13.4 billion in 1977).

The overall U.S. trade balance experienced a downturn with all major areas except the European Community and the Communist countries since 1970 (Table 4). In 1977, the EC still provided the U.S. with a trade surplus of $4.4 billion.* The only other major trade surplus in 1977 was with Communist countries in Europe and Asia, although this surplus declined to $1.6 billion from the 1976 peak of $2.5 billion. Trade with Japan and South and East Asia underwent serious deteriorating deficits since 1975, with these areas accounting for a combined U.S. trade deficit of $15.2 billion in 1977.

TABLE 3.—CHANGES IN COMPOSITION OF U.S. IMPORTS AND EXPORTS 1970 AND 1977

	Percent of total imports	Percent of total imports, excluding petroleum plus petroleum products excluding gas	Percent of total exports
Foods, feeds, and beverages:			
1970	15.5	16.6	13.4
1977	9.5	13.2	16.3
Industrial supplies and materials:			
1970	37.8	[1] 33.2	31.9
1977	51.5	[1] 32.5	27.9
Capital goods, excluding automotive:			
1970	9.5	10.2	31.9
1977	9.1	12.7	32.4
Automotive vehicles parts and engines:			
1970	15.0	16.0	8.6
1977	12.7	17.7	10.1
Consumer goods (nonfood), excluding automotive:			
1970	19.0	20.3	6.3
1977	15.3	21.3	7.3

[1] Industrial supplies and materials, excluding petroleum and petroleum products, excluding gas.

Source: Commerce Department, FT 990.

TABLE 4.—U.S. IMPORTS FROM AND EXPORTS TO SELECTED AREAS, 1974–77

[In millions of dollars]

	Imports	Exports	Balance
European Community:			
1974	19.0	22.1	3.1
1975	16.6	22.9	6.3
1976	17.8	25.4	7.6
1977	22.1	26.5	4.4
Japan:			
1974	12.3	10.7	−1.6
1975	11.3	9.6	−1.7
1976	15.5	10.1	−5.4
1977	18.6	10.5	−8.1
Near East:			
1974	4.7	5.6	.9
1975	5.4	8.9	3.5
1976	9.1	10.0	.9
1977	13.0	11.0	−2.0
Western Hemisphere, excluding Canada:			
1974	18.4	15.8	−2.6
1975	16.0	17.1	1.1
1976	17.1	17.0	−.1
1977	20.9	17.9	−3.0

*The U.S. balance in manufactured goods with the EC showed a surplus of $2.05 billion in 1977; the U.S. had a surplus in foods, feeds and beverages of $4.04 billion and a surplus in capital goods of $4.56 billion.

TABLE 4.—U.S. IMPORTS FROM AND EXPORTS TO SELECTED AREAS, 1974–77—Continued

	Imports	Exports	Balance
Canada:			
1974	21.9	19.9	−2.0
1975	21.7	21.7	0
1976	26.2	24.1	−2.1
1977	29.4	25.7	−3.7
Communist countries, Europe and Asia:			
1974	1.0	2.2	1.2
1975	.9	3.1	2.2
1976	1.1	3.6	2.5
1977	1.1	2.7	1.6
East and South Asia, excluding Japan and Communist countries:			
1974	10.2	9.2	−1.0
1975	10.2	10.1	−.1
1976	14.6	10.2	−4.4
1977	17.8	10.7	−7.1

Source: Commerce Department, "Trends in U.S. Foreign Trade," 1975 and 1977.

II. THE ROLE OF OIL IN THE TRADE DEFICIT

Since 1970, the U.S. imports of crude petroleum have quintupled in quantity and have risen 26 times in value (from 500 million barrels in 1970 to 2.5 billion barrels in 1977; from $1.3 billion to $33.6 billion). Purchases of petroleum and petroleum products totalled $41.5 billion in 1977, compared to $2.8 billion in 1970.* The impact of dramatically increasing oil imports on the balance of trade has been the subject of abundant commentary. It is important to note, however, that while oil is one major problem in the trade balance, it is by no means the only one.

Simply subtracting oil from the trade flow does not permit an accurate assessment of the non-oil trade balance. Oil-exporting countries would not have greatly increased their purchases from the U.S. in recent years had they not benefitted from rising oil revenues. By subtracting total OPEC trade, a more realistic assessment of the evolving U.S. trade position is possible (Table 5). A Commerce Department staff report concludes that this alternate measure indicates that even though it is merely an approximation the trade balance "is not in a sharp surplus position as supposedly indicated by the 'non-oil' balance."** It is also significant that the "non-OPEC" trade balance also fell from a peak surplus in 1975 to a deficit in 1977.

TABLE 5.—U.S. TRADE BALANCES, 1965–77

[In billions of dollars]

	Overall trade balance	Non-oil trade balance	Non-OPEC trade balance
Year:			
1965	6.1	7.8	6.4
1966	4.8	6.5	5.0
1976	4.7	6.3	4.8
1968	1.4	3.3	1.2
1969	2.0	4.1	1.6
1970	3.3	5.5	2.9
1971	−1.4	1.4	−1.7
1972	−5.8	−2.0	−5.9
1973	1.9	9.0	2.8
1974	−1.7	21.7	7.2
1975	11.5	35.4	17.8
1976	−5.7	25.1	6.8
1977 [1]	−25.1	16.4	−4.5

[1] 6 mo, seasonally adjusted, annual rate.

Note: See page 13 for definition of various balances.

Source: Commerce Department, Bureau of International Economic Policy and Research, Staff Economic Report, "The U.S. Trade Balance Less Oil: Is It Meaningful?" August 1977, p. 6.

*Figures do not include gas. The Census Bureau statistc used here do not include oil imported in the Virgin Islands for U.S. consumption, which amounted to $2.6 billion in 1977.

**Commerce Department, Bureau of International Economic Policy and Research, Staff Economic Report, "The U.S. Trade Balance Less Oil: Is It Meaningful?" August 1977, p. 3.

In addition, the U.S. trade account has not yet adjusted adequately to a world trading environment characterized by permanently higher oil prices. Other major exporting countries such as Japan and West Germany, already almost entirely dependent on imported oil, had "merely" to absorb the price increases and have done so in a remarkably short time. The United States, in addition, has had to factor into its trade increased oil and gas imports to make up for absolute declines in domestic oil production. The present U.S. system of differential pricing of foreign and domestic oil obviously is transitional and will evolve toward a system of world prices—but with results for the trade account that cannot be fully foreseen.

III. TRADE IN MANUFACTURES

U.S. trade in manufactures in 1977 was generally unsatisfactory (Table 6). The trade balance for all manufactures (SITC 5 through 8) experienced a surplus of $4.8 billion, down from the surplus of $13.8 billion in 1976, and $21 billion in 1975. The first quarter of 1978 showed a deficit of $3.1 billion. Although it is unwise to use first quarter figures to project annual levels (the annualized deficit would be $12.6 billion), it is noteworthy that the first quarter of 1978 was the sixth quarter in a row which showed generally declining rates for the manufactures balance.

TABLE 6.—U.S. IMPORTS AND EXPORTS OF MANUFACTURED GOODS AND CAPITAL GOODS 1970, 1976, 1977

[In billions of dollars]

	Imports	Exports	Balance
Manufactures (SITC 5, 6, 7, 8):[1]			
1970	25.9	29.7	3.8
1976	64.8	78.5	13.8
1977	77.2	82.0	4.8
1978 (I)	94.8	82.2	−12.6
Chemicals (5):			
1970	1.5	3.8	2.4
1976	4.8	10.0	5.2
1977	5.4	10.8	5.4
1978 (I)	6.0	11.0	5.0
Manufactured goods by material (6):			
1970	8.4	5.1	−3.4
1976	17.6	11.2	−6.4
1977	21.4	11.3	−10.1
1978 (I)	27.2	11.0	−16.2
Machinery and transport equipment (7):			
1970	11.2	17.9	6.7
1976	29.8	49.5	19.7
1977	35.5	51.0	15.5
1978 (I)	44.4	51.2	6.9
Miscellaneous manufactured articles (8):			
1970	4.8	2.6	−2.3
1976	12.6	6.6	−6.0
1977	14.9	7.3	−7.5
1978 (I)	17.3	9.0	−8.4
Capital goods, excluding automotive:			
1970	3.8	14.4	10.6
1976	10.9	38.3	27.4
1977	13.4	39.0	25.7
1978 (I)	16.9	39.6	22.7

[1] Manufactures total includes reexports.

Note: F.A.S. except for 1970 where customs values are shown.

Source: Commerce Department, FT-990, and "International Economic Indicators."

A. TRADE IN SELECTED CATEGORIES OF MANUFACTURES

Capital goods had a $25.7 billion surplus in 1977, down from the previous surplus of $27.4 billion. Further breakdown of the manufactures category shows that in 1977 chemicals (SITC 5),* manufactured goods by material such as steel and paper (SITC 6), and miscellaneous manufactured articles (SITC 8) encountered further deterioration of the 1976 deficits, with the greatest deficit increase occurring for manufactured goods by material, which fell from a $6.4 billion deficit in 1976 to $10.0 billion deficit last year. Machinery and transport equip-

*See statistical appendix for definition of SITC classification system and end-use categories.

ment (SITC 7) posted a surplus of only $15.5 billion, down $4.2 billion from 1976.

Further examination of the groups losing ground in 1977 shows considerable weakness in two areas. Within the category of machinery and transport equipment, the transport equipment group had a 1977 surplus of only $0.7 billion, down $3.1 billion from 1976. The deficit in new automobiles grew by $1.3 billion, producing a deficit of $7.2 billion in 1977; but trucks and other vehicles also contributed to this decline. Within the category of manufactured goods by material, the balances for iron and steel and for paper worsened (from a deficit of $0.5 billion to $0.9 billion for paper; from a deficit of $2.4 billion to $4.1 billion for iron and steel). Within the category of miscellaneous manufactured articles, several subgroups accounted for the deterioration, including clothing, musical instruments and phonographs, and toys and sporting goods.

TABLE 7.—RELATIVE IMPORTANCE OF MAJOR AREAS FOR U.S. MANUFACTURES TRADE, 1970 AND 1977

[In percent]

	1970	1977
A. Source of U.S. imports of manufactures:		
Developed countries [1]	84.4	74.8
Canada	28.1	23.5
Western Europe [2]	34.7	27.8
Japan	21.6	23.5
Communist areas in Europe and Asia	.5	.8
Developing Countries [3]	15.1	24.4
Brazil, Hong Kong, Mexico, South Korea, Singapore, and Taiwan	8.6	16.2
B. Markets for U.S. exports of manufactures:		
Developed countries [1]	62.8	55.6
Canada	24.3	26.0
Western Europe [2]	31.9	25.0
Japan	6.6	4.6
Communist areas in Europe and Asia	.5	1.1
Developing countries [3]	36.7	43.3
Brazil, Hong Kong, Mexico, South Korea, Singapore, and Taiwan	9.5	11.2

[1] OECD countries.
[2] OECD in Europe.
[3] All countries excluding OECD countries and Communist countries.

Source: Commerce Department, FT 155, FT 455.

TABLE 8.—RELATIVE IMPORTANCE OF SELECTED DEVELOPING COUNTRIES IN U.S. TRADE, 1970 AND 1977

	1970	1977
A. Brazil, Hong Kong, Mexico, Singapore, South Korea, and Taiwan: Share (percent) of U.S. imports of:		
All goods	9.6	11.8
Manufactured goods (SITC 5–8)	8.6	16.2
Chemicals (SITC 5)	2.8	3.7
Manufactured goods by material (SITC 6)	5.1	10.3
Machinery and transportation (SITC 7)	4.8	10.9
Miscelleneous manufactured articles (SITC 8)	25.6	41.8
B. Brazil, Hong Kong, Mexico, Singapore, South Korea, and Taiwan: Share (percent) of U.S. exports of:		
All goods	10.1	11.4
Manufactured goods (SITC 5–8)	9.5	11.2
Chemicals (SITC 5)	11.4	16.4
Manufactured goods by material (SITC 6)	8.6	9.5
Machinery and transportation (SITC 7)	9.5	10.7
Miscelleneous manufactured articles (SITC 8)	9.8	9.5

Source: Commerce Department, FT, 155, FT 455.

B. U.S. TRADE PARTNERS IN MANUFACTURES

The origin of U.S. imports of manufactures has changed significantly since 1970 (Table 7). Developing countries boosted their share of U.S. imports from 15.1 percent in 1970 to 24.4 percent in 1977, and within this group, six rapidly

industrializing countries (Brazil, Hong Kong, Mexico, Singapore, South Korea, Taiwan) doubled their share of U.S. manufactured imports in that period (Table 8). Furthermore, these six countries have greatly strengthened their relative position among developing country exporters of manufactures: while these six countries accounted for one-half of all LDC manufactured goods imported by the U.S. in 1970, they accounted for two-thirds in 1977. Taiwan was the leader, with manufactured goods exports to the U.S. valued at $3.5 billion in 1977. Manufactured goods imports from developing countries totaled $12.5 billion in 1977 (Table 7).

Developed countries in general remain the major source of foreign manufactures for the United States, although their share decreased from four-fifths of U.S. imports in 1970 to three-fourths in 1977. Within the advanced countries, Western Europe remains the dominant supplier, followed by Canada and Japan. Only Japan increased its share of the U.S. market during this eight-year period, from 21.6 percent in 1970 to 23.5 percent in 1977.

Communist countries continue to provide a relatively negligible portion of U.S. imports of manufacturers, although their share increased from 0.5 percent to 0.8 percent.

The country distribution of U.S. exports of manufactures has followed the general pattern of changes shown by the sources of U.S. manufactured imports: Developing countries are becoming more important for the U.S. (although the increase in LDC shares for U.S. exports is smaller than for U.S. imports). LDC buyers purchased two-fifths of U.S. manufactured exports in 1977. Within the group of LDCs, the oil-exporting countries have more than doubled their relative shares for U.S. manufactured exports, from 5.9 percent in 1972 to 13.1 percent in 1976.* Developed country markets declined somewhat in relative importance, from 62.8 percent in 1970 to 59.6 percent in 1977. Within this group, Canada replaced Western Europe as the most important market in 1977, purchasing almost one-third of U.S. manufactured exports. Western Europe's share dropped from 31.9 percent to 25.0 percent.

Communist countries continued to purchase a relatively small amount of U.S. manufactured exports: 1.1 percent in 1977, an increase of 0.6 percent over the 1970 level.

The most striking aspect of the developed country statistics is the low level or share of U.S. manufactured exports to Japan. Japan accounted for only 6.6 percent of U.S. export sales in 1970, and this share fell by almost one-third to 4.6 percent in 1977. In comparing the origins of U.S. manufactured exports, one major asymmetry becomes apparent: In 1977 Japan supplied 25.0 percent of U.S. manufactured imports but purchased only 4.6 percent of U.S. manufactured exports. No other area shows such great imbalance between sales to and purchases from the United States.

U.S. trade balances in capital goods worsened in 1977 for every major area with the exception of the European Community (Table 9). Most severe was the deterioration in the deficit with Japan, where the balance dropped further into deficit by 200 percent. The surplus with Communist countries decreased by 38 percent, and with East and South Asia by 8 percent.

TABLE 9.—U.S. TRADE IN CAPITAL GOODS WITH SELECTED AREAS, 1970, 1976–77

[In billions of dollars]

	U.S. imports from—	U.S. exports to—	Balance [1]
European Community (9):			
1970 [2]	1.6	4.1	2.5
1976	3.8	8.4	4.5
1977	4.5	9.1	4.6
Japan:			
1970	.6	1.2	.6
1976	2.2	1.7	−.4
1977	3.0	1.7	−1.2
Near East:			
1970	0	.4	.4
1976	.1	4.4	4.4
1977	.1	4.2	4.2

*General Agreement on Tariffs and Trade, *International Trade 1976/1977* (GATT: Geneva 1977), Appendix, Table A.

TABLE 9—U S TRADE IN CAPITAL GOODS WITH SELECTED AREAS, 1970, 1976–77—Continued

[In billions of dollars]

	U.S. imports from—	U.S. exports to—	Balance
Western Hemisphere, excluding Canada:			
1970	.1	2.4	2.2
1976	.9	6.6	5.7
1977	1.0	6.6	5.6
Canada:			
1970	.8	2.6	1.7
1976	1.7	6.1	4.4
1977	2.0	6.3	4.4
Communist countries, Europe, and Asia:			
1970	0	.1	.1
1976	.1	.8	.8
1977	.1	.6	.5
East and South Asia, excluding Japan and Communist countries:			
1970	.2	1.1	.9
1976	1.4	4.0	2.5
1977	1.8	4.2	2.3

[1] Discrepancies in balances due to rounding.
[2] Excludes Denmark and Ireland, for which data are unavailable; includes United Kingdom.

Source: Commerce Department, FT 990.

TABLE 10.—TRADE IN MANUFACTURES: UNITED STATES, FEDERAL REPUBLIC OF GERMANY, JAPAN, 1970, 1975–77

[In billions of dollars

	United States			Federal Republic of Germany			Japan		
	Imports	Exports	Balance	Imports (CIF)	Exports (FOB)	Balance	Imports (CIF)	Exports (FOB)	Balance
1970	25.9	29.7	3.8	17.4	30.7	13.3	5.6	18.1	12.5
1975	51.1	72.1	21.0	50.0	79.6	29.6	11.5	53.2	41.7
1976	64.8	78.5	13.8	48.6	90.7	42.1	13.4	64.6	51.2
1977	77.2	82.0	4.8	[1] 56.3	[1] 99.5	[1] 43.2	[1] 14.4	[1] 79.5	[1] 65.1
1977:[2]									
I	69.8	80.3	10.6	55.0	98.9	43.9	13.8	68.5	54.7
II	78.4	85.5	7.1	55.6	101.5	45.9	15.2	75.9	60.7
III	79.0	79.3	.3	56.3	99.5	43.2	14.4	79.5	65.1
IV	81.7	82.8	1.1	[3]	[3]	[3]	[3]	[3]	[3]
1978 I:[2]	94.8	82.2	−12.6						

[1] 1977, III at annual rates.
[2] At annual rates.
[3] Not available.

Note: F.A.S. except where noted.

Source: Commerce Department, "International Economic Indicators."

C. TRADE PERFORMANCE OF U.S. AND SELECTED COUNTRIES

The U.S. trade performance in manufactures was feeble compared to that of West Germany and Japan (Table 10). The U.S. surplus in manufactures has continued to decline sharply from its 1975 peak of $21.0 billion, and in the last quarter of 1977 the annual rate based on the fourth quarter alone was only $1.1 billion. In the first quarter of 1978, the annual rate sank to a deficit of $12.6 billion. In comparison, the manufactures trade balances of West Germany and Japan have continued to improve, with the projected 1977 surplus of Germany growing to $43.2 billion and that of Japan growing to $65.1 billion, based on the third quarter of 1977. When trade in manufactures for the United States, West Germany, and Japan is related to domestic production of manufactured goods, the export orientation of these major U.S. competitors becomes apparent (Table 11). Germany's imports, as a share of domestic production of manufactured goods, increased by 6.5 percent from 1970 to 1976, while the figure for German exports increased by 14.4 percent. For Japan, the comparable import statistic actually declined 0.4 percent, while the export figure increased dramatically by 15.5 percent. For the U.S., manufactured goods imports and exports as a per-

centage of domestic manufactured goods production increased 6.3 percent and 7.5 percent, respectively.

TABLE 11.—RELATIVE IMPORTANCE OF MANUFACTURED GOODS PRODUCTION, UNITED STATES, FEDERAL REPUBLIC OF GERMANY, AND JAPAN, 1970 AND 1976

	United States		Federal Republic of Germany		Japan	
	Imports	Exports	Imports	Exports	Imports	Exports
A. Manufactures trade as a percentage of domestic production of manufactured goods:						
1970	11.2	12.8	22.6	39.9	11.6	37.6
1976	17.5	21.2	29.1	54.3	11.2	53.1
B. Manufactures trade as a percentage of GNP:						
1970	2.6	3.0	9.4	16.5	2.9	9.2
1976	3.8	4.6	10.5	19.5	2.4	11.8

Sources: Department of Commerce, "International Economic Indicators; International Economic Report of the President 1977," table 2; "Monthly Report of the Deutsche Bundesbank, December 1977, table III.1; Bank of Japan, "Economic Statistics Monthly," December 1977, table 121–2(8); "IMF International Financial Statistics."

TABLE 12.—COMPARISON OF EXPORT PERFORMANCE OF U.S. AND SELECTED COUNTRIES, 1975–77

[In billions of dollars]

	West Germany		European Community		Japan	
Destination	Value	Percent change from previous year	Value	Percent change from previous year	Value	Percent change from previous year
A. Exports of manufacturers by West Germany, European Community, and Japan, 1975–77:						
To world:						
1957	79.6	----------	233.3	----------	53.2	----------
1976	90.7	13.9	257.7	10.5	64.6	21.4
1977	99.5	9.7	302.7	17.5	79.5	23.1
To world, excluding United States:						
1975	74.6	----------	219.3	----------	42.2	----------
1976	85.5	14.6	242.9	10.8	49.6	17.0
1977	92.8	8.5	284.6	17.2	61.4	23.8
B. U.S. exports of manufacturers, 1975–77:						
1975	72.1	----------	----------	----------	----------	----------
1976	78.5	8.9	----------	----------	----------	----------
1977	82.0	6.2	----------	----------	----------	----------

Note: 1975: FOB; 1976–77: F.A.S.

Source: Commerce Department, International Economic Indicators; GATT, International Trade 1976–77, appendix table A plus D; European Community, Monthly Trade Bulletin; 1977 European Community figures projected from January–September 1977, with EUA 1 equals $1.124.

TABLE 13.—DEVIATIONS FROM CONSTANT SHARE NORMS FOR MANUFACTURING EXPORTS, BY TRADING PARTNERS: 1970–73, 1973–76, and 1970–76

[In millions of dollars]

Partner and period	United States	Germany	Japan	United Kingdom	France	Italy	Belgium-Luxembourg	Netherlands	Canada
United States:									
1970–73		475	−7	296	132	−209	168	84	−1,325
1973–76		−2,356	2,945	−614	177	−120	−555	−163	928
1970–76		−1,663	2,996	−219	364	−386	−323	−24	−1,003
Canada:									
1970–73	46	29	11	−149	37	1	23	−26	---------
1973–76	583	−103	55	−387	−42	11	−34	−37	---------
1970–76	649	−59	74	−609	14	12	0	−76	---------
Japan:									
1970–73	−157	121	---------	−31	89	51	32	4	−76
1973–76	88	−152	---------	−66	−32	1	−65	−18	−11
1970–76	−97	−19	---------	−105	68	59	−32	−15	−91

TABLE 13.—DEVIATIONS FROM CONSTANT SHARE NORMS FOR MANUFACTURING EXPORTS, BY TRADING PARTNERS: 1970–73, 1973–76, and 1970–76—Continued

[In millions of dollars]

Partner and period	United States	Germany	Japan	United Kingdom	France	Italy	Belgium-Luxembourg	Netherlands	Canada
Australia, New Zealand, South Africa:									
1970–73	−36	237	560	−361	−20	15	47	−4	−152
1973–76	340	−333	311	−720	106	−91	−21	−60	50
1970–76	261	41	1,189	−1,293	70	−69	46	−68	−175
EEC–9:									
1970–73	−3,902	1,943	1,006	−670	1,180	−612	549	850	−941
1973–76	−108	−1,733	732	1,050	−835	988	−541	−940	−305
1970–76	−6,025	1,141	2,224	53	948	37	338	375	−1,676
Other developed Europe:									
1970–73	−550	304	204	−192	181	−71	16	198	−34
1973–76	188	−399	330	−302	−143	167	41	−177	−13
1970–76	−635	61	635	−635	133	60	72	118	−62
Developing Europe:									
1970–73	−462	129	−9	−293	209	40	35	78	−39
1973–76	169	24	333	−125	−122	80	−68	−128	−13
1970–76	−498	212	318	−547	179	140	−16	−13	−71
Eastern Europe:									
1970–73	36	1,154	−40	−386	−55	−480	114	62	−12
1973–76	310	−1,236	1,202	−411	111	−389	−152	−132	−1
1970–76	379	846	1,144	−1,102	5	−1,244	51	−23	−24
Africa::									
1970–73	−237	122	428	−422	5	−68	−55	27	6
1973–76	171	−41	−176	230	407	14	−26	79	43
1970–76	−268	183	636	−555	403	−114	−130	125	53
Caribbean:									
1970–73	−43	76	450	−173	−109	−123	5	−26	−68
1973–76	19	−260	229	−108	23	−45	−28	−72	22
1970–76	−65	−127	1,055	−416	−182	−263	−26	−123	−94
South America:									
1970–73	−559	126	479	−119	139	−37	47	57	−191
1973–76	704	−496	18	−113	−137	51	−112	−193	222
1970–76	−129	−274	796	−317	120	−7	−35	−98	−96
Middle East:									
1970–73	−117	92	391	−249	−392	125	51	37	35
1973–76	1,058	255	1,977	−1,319	−1,468	−244	−570	−167	59
1970–76	677	587	3,267	−2,171	117	117	−464	−65	185
Central Asia and Far East:									
1970–73	−287	54	931	−298	70	−128	−19	12	−94
1973–76	164	−203	−10	−649	439	−93	118	−108	−27
1970–76	−238	−142	1,418	−1,122	548	−299	90	−94	−177

Note: The table compares the hypothetical export level—that which would be needed to maintain the market share—with the actual export level. A positive deviation indicates an increasing market share. A negative deviation indicates a decreasing market share. The size of the deviation indicates the amount of exports needed to regain the initial market share (in the case of a negative deviation) or the amount by which exports exceeded the level necessary to maintain the initial market share (in the case of a positive deviation).

Source: C. Michael Aho and Richard D. Carney, "United States Export Performance in the Post-Devaluation Period: Continuation of a Secular Decline?" Statement submitted to the Senate Committee on Banking, Housing, and Urban Affairs, Subcommittee on International Finance, Feb. 23, 1978, p. 14A.

The argument is frequently made that the poor U.S. export performance in manufactures since 1975 is the result of slow economic growth abroad. The data in Table 12 indicates that at best this view is incomplete. The West German and EC manufactures export growth rates for 1975–76 are higher for the world excluding the United States than they are for the entire world; furthermore, these rates (plus the Japanese rates) are higher than the U.S. rate for 1976. In 1977, the EC rate is slightly lower (by 0.3 percent) for the non-U.S. world, and the Japanese rate is slightly higher (0.7 percent), Again, rates for all three exporting areas to the world excluding the United States are higher than the U.S. export growth rate. If the growth rate (conjunctural business cycle) argument were fully valid, one would have expected to see much more pronounced differences in the export records of these areas between the world and the non-U.S. world markets. Stated otherwise, Japanese, German and EC export growth rates to third countries would have been expected to be less buoyant than their exports to the United States. The United States, with faster economic growth, should have pulled in imports more rapidly than third countries.

The U.S. market share performance in manufactures in major areas of the world has been weak compared to other important exporting nations (Table 13).

From 1970 to 1976, the U.S. share declined in every major area except Canada and the Middle East. Japan, on the other hand, advanced in every area. West Germany lost shares in several areas including the U.S. itself, Canada, South America, and the Far East. In the important Middle East market, Japan had the greatest share expansion compared with other developed nations, followed by the United States and Germany.

GROWTH RATES OF U.S. MANUFACTURED IMPORTS AND EXPORTS

[Percentage change from previous year]

	Imports	Exports
1966	28.6	10.3
1967	9.7	9.9
1968	30.4	14.2
1969	11.7	12.5
1970	12.6	9.6
1971	17.4	3.7
1972	24.3	11.4
1973	19.0	32.7
1974	22.7	41.7
1975	−7.4	11.6
1976	26.8	8.9
1977	19.1	4.5

Source: Commerce Department, "International Economic Indicators."

Since 1960 major changes have occurred in world market shares of manufactured goods exports (Table 14). In the decade of the 1960s, the United States lost much of its market share, from one-fourth of world manufactured goods exports in 1960 to one-fifth in 1970. West Germany surpassed the United States in the early 1970s as the chief world exporter of manufactures. U.S. export growth of manufactured goods improved dramatically in 1973 and 1974, reflecting dollar devaluation and strong economic growth abroad (Graph 2). Afterward, export growth slackened, approaching the sluggish pre-devaluation growth rates, as other developed countries entered periods of low economic activity and the developing countries exhausted their import financing resources. U.S. sales of manufactured goods abroad reflected the downturn in foreign markets. Therefore, the major improvement in the U.S. trade balance in 1973–75, which many attributed almost entirely to dollar devaluation, was due to a great extent to traditional business cycle developments at home and abroad.

TABLE 14.—SHARES OF WORLD EXPORTS OF MANUFACTURERS

	United States		Federal Republic of Germany	France	Japan	United Kingdom
	Excluding exports	Other				
1960	25.3	22.8	18.2	9.1	6.5	15.3
1969	22.5	19.3	18.7	7.8	10.7	10.7
1970	21.3	18.4	19.0	8.3	11.2	10.1
1971	20.1	17.2	19.3	8.3	12.7	10.5
1972	19.1	16.3	19.3	8.7	13.5	9.7
1973	19.5	16.7	20.3	8.7	13.3	9.0
1974	20.2	17.7	20.2	8.2	14.8	8.2
1975	21.2	18.9	18.6	9.0	14.2	9.0
1976	20.5	18.3	19.1	8.9	14.8	8.4
1977:						
I [1]	19.9	18.1	19.3	9.2	14.5	8.7
II [1]	20.0	18.6	18.5	9.0	15.0	9.5

[1] Annual rates.

Source: Commerce Department, "International Economic Indicators," March 1978.

GRAPH 2
GROWTH RATES OF U.S. MANUFACTURED IMPORTS AND EXPORTS, 1966-1977
(percent change from previous year)

Source : Commerce Department, FT 990.

U.S. imports of manufactures, on the other hand, actually fell in 1974, as the United States entered its economic slump earlier than other major countries. By 1976, however, imports resumed their brisk pace, reflecting the U.S. recovery, while manufactured exports maintained their low growth rates. Thus, both U.S. exports and imports saw their growth rates interrupted in the early 1970s. A poor export trend in the present decade has been interrupted by two good years. It seems that since 1976 the unfavorable trends in U.S. manufactured goods trade are reestablishing themselves as weak export growth accompanies strong import growth. By 1976, the U.S. market share of world manufactured exports began to decline from the 1975 peak.

Other countries experienced great changes in their export position. The United Kingdom, for example, has lost one-third of its share of world exports of manufactures since 1960. Japan has greatly increased its share, from 6.5 percent in 1960 to 14.8 percent in 1976. France has regained its 1960 market share after some weakness in its export performance in the early 1970s.

From 1970 to 1976, the U.S. has lost market shares in all four groups of manufactures (Table 15). The severest drop was in machinery and transport, followed by chemicals manufactures by material, and miscellaneous manufactures. Only foods and materials (except fuels) show an expanding market share. It is illuminating to note that, when this period is subdivided into 1970–73 and 1973–76, manufactures consistently lose shares in the earlier period and rebound in the latter one—but not sufficiently to regain their initial market share.

TABLE 15.—DEVIATIONS FROM CONSTANT SHARE NORMS AT THE 1-DIGIT SITC LEVEL, 1965–70, 1970–73, 1973–76, AND 1970–76—

[In millions of dollars]

1-Digit SITC categories and period	United States	Germany	Japan	United Kingdom	France	Italy	Belgium-Luxembourg	Netherlands	Canada
Food (0):									
1965–70	−1,690	396	129	−57	239	−232	288	−346	−562
1970–73	3,301	561	−433	70	832	−446	179	−209	−312
1973–76	−2,258	−27	−411	−8	−920	89	−83	430	−264
1970–76	2,617	801	−1,050	96	307	−571	181	122	−724
Beverages and tobacco (1):									
1965–70	−93	11	−1	20	47	44	−8	20	19
1970–73	−222	66	−9	−224	421	120	42	56	−129
1973–76	164	104	45	−21	−356	19	14	34	−72
1970–76	−132	192	33	−320	207	180	70	108	−244
Materials (except fuels) (2):									
1965–70	−53	−23	−37	−27	−208	−95	−151	−31	44
1970–73	1,078	311	159	18	338	−1	27	209	−3
1973–76	−1,418	−100	−119	−175	−290	−39	−184	−135	−541
1970–76	155	354	114	−149	204	−40	−144	170	−546
Fuels (3):									
1965–70	−106	−297	−6	−185	−209	−35	−61	255	260
1970–73	−1,232	−123	5	4	72	44	71	818	642
1973–76	404	−976	−93	186	−116	−806	125	−589	−298
1970–76	−2,395	−1,255	−80	194	48	−706	287	1,270	1,159
Fats and oils (4):									
1965–70	−179	25	−15	−5	16	9	14	45	3
1970–73	−151	101	−7	4	50	11	18	31	−12
1973–76	6	42	−1	−3	7	4	26	0	12
1970–76	−205	184	−11	8	77	20	51	43	−5
Chemicals (5):									
1965–70	−613	254	223	−386	−103	−211	257	310	29
1970–73	−1,165	546	−92	−290	323	13	533	670	−270
1973–76	158	−1,088	−4	108	−514	20	91	195	170
1970–76	−1,803	−169	−158	−380	29	43	989	1,324	−285
Materials manufactured (6):									
1965–70	−514	657	616	−1,029	−390	−219	6	−38	−88
1970–73	−1,431	2,048	−366	−111	302	421	461	553	−1,746
1973–76	440	−1,390	2,687	−1,582	239	822	−2,489	−142	−313
1970–76	−1,682	1,646	2,144	−1,747	208	1,447	−1,805	678	−2,901
Machinery and transport (7):									
1965–70	−2,257	−729	2,519	−3,257	552	489	−117	−413	2,988
1970–73	−4,193	3,020	4,074	−2,497	918	−1,013	359	313	−1,739
1973–76	1,019	−4,791	5,179	−1,790	1,372	−383	43	−55	−1,171
1970–76	−5,979	250	11,977	−5,957	2,903	−2,073	642	468	−4,072
Miscellaneous manufactured articles (8):									
1965–70	−586	77	268	−218	−174	401	−11	78	91
1970–73	−650	442	−703	−294	614	−388	216	213	−41
1973–76	491	−360	90	−42	−537	708	−327	−43	−16
1970–76	−494	310	−975	−488	394	120	−1	280	−78
Not claasified (9):									
1965–70	−6	131	79	−124	−36	−102	24	−18	37
1970–73	−246	62	169	25	−49	2	80	−20	−64
1973–76	490	177	6	−338	−25	84	361	−19	30
1970–76	−914	283	299	−295	−110	88	499	−54	−81
Total exports:									
1965–70	−7,123	1,246	3,757	−5,091	−772	−25	−1,412	−5	1,734
1970–73	−4,933	7,087	2,673	−3,461	4,066	−1,056	1,780	3,075	−4,045
1973–76	−1,723	−6,997	7,280	−3,499	−2,379	−1,056	−3,006	874	−1,933
1970–76	−9,601	4,319	11,526	−9,025	4,113	−878	−164	5,785	−8,392

Note: The table compares the hypothetical export level—that which would be needed to maintain the market share—with the actual export level. A positive deviation indicates an increasing market share. A negative deviation indicates a decreasing market share. The size of the deviation indicates the amount of exports needed to regain the initial market share (in the case of a negative deviation) or the amount by which exports exceeded the level necessary to maintain the initial market share (in the vase of a positive deviation).

Source: C. Michael Aho and Richard D. Carney, "United States Export Performance in the Post-Devaluation Period: Continuation of a Secular Decline?" Statement submitted to the Senate Committee on Banking, Housing, and Urban Affairs, Subcommittee on International Finance, Feb. 23, 1978, p. 13A.

D. U.S. TRADE IN CAPITAL GOODS

Within the capital goods category, the strongest export performer was electric machinery, which accounted for one-fifth of all capital goods exports in 1977 (Table 16). For the 1970–77 period, its average annual growth rate was 4.3 percent higher than the general capital goods rate. Electric machinery showed a vigorous export expansion in 1975–76 (10.6 percent). This is in marked contrast to the general decline in capital goods export sluggishness. The most vigorous electric machinery subgroup was generators, transformers and accessories (including switchgear), with a 1970–77 expansion record of 25.2 percent per year, on the average.

Non-electric machinery, supplying four-fifths of 1977 capital goods exports, grew at an average rate of 15.1 percent per year from 1970–77. Strong performers within this group for the entire period include drilling and oil-field equipment and tractors and agricultural machinery, and scientific instruments. A pronounced drop in growth rates has been apparent since 1975 for drilling and oilfield equipment and tractors and agricultural machinery as large oil projects have been completed and LDC farm programs have encountered financing difficulties. An upturn is evident since 1975 for business equipment including computers and copiers, contrasting with a 1970–77 average-growth performance which ranked lower than the overall capital goods record. The absolute value of business machinery exports represents a major segment of capital goods sales, amounting to $4.08 billion in 1977.

TABLE 16.—CHANGES IN U.S. EXPORTS BY END-USE CATEGORY, 1970, 1975–77

Category	1977 value (billions)	Percent change		
		1970–77 average annual rate	1975–76	1976–77
Grand total	$120.16	15.7	6.9	4.5
Foods, feeds and beverages	19.59	18.9	3.3	−.5
Industrial supplies and materials	33.53	13.5	6.0	4.8
Capital goods, excluding automotive	39.05	15.3	8.1	1.9
Elec. mach., ex. consumer type	7.38	19.8	24.0	10.6
Generators, transf., and access. (switchgear, etc.)	1.64	25.2	30.8	9.4
Broadcasting and commun. eq. ex. telephonic and related elec. and electron compon.	3.34	19.7	30.5	8.1
Telephonic eq. plus elec. apparatus n.e.c., incl. elec. furnaces, motors, cable, batt, X-ray, etc	2.41	17.3	11.7	15.1
Non-elec. mach, ex, consmr.-type	25.46	15.1	5.3	3.1
Constr. and contracting mach. plus nonfarm factors, pts. and attach., n.e.c	5.38	15.5	.4	−9.5
Drilling plus oilfield eq	1.34	23.4	4.3	−17.2
Excavating plus paving mach	2.44	15.5	1.4	−5.8
Nonfarm factors, pts. and attach	1.22	11.2	−5.6	−7.5
Non-elec. ind. mach., n.e.c.; pts. and attach., n.e.c	12.27	14.3	4.3	2.6
Power-gen. mach. ex. eng. for aircr. plus autos	1.64	15.2	−1.2	−3.0
Mach. tools plus metalwkg. mach, n.e.c. plus pts	.89	7.7	.3	−9.0
Spec. indl. mach., n.e.c., plus pts	1.74	14.1	2.0	8.4
Measuring, testing, and control instruments plus pts	1.92	14.4	8.9	16.1
Indl. mach., compon., plus pts., n.e.c., incl. pumps, compressors, valves, bearings, furnaces, etc	3.82	15.8	8.7	4.6
Ag. scien. plus bsns. mach., eq., plus fixtures; pts. and attach., n.e.c	7.81	16.4	12.1	15.0
Tractors, farm and garden, and pts. and attach	.87	25.3	23.4	−6.5
Ag. mach plus pts., ex. tractors plus pts	.71	21.7	1.7	2.9
Bsns. mach, ind. off, comput., copying, etc.	4.08	13.4	10.8	23.7
Scien., prof., med, plus hosp. instrum. plus eq	1.06	21.0	18.3	16.4
Eq., tools, plus fixtures for photo and other service ind	1.10	17.8	9.3	13.0
Civilian aircraft—Complete, all types	2.75	8.7	1.3	−14.3
Automotive vehicle, points plus engine	12.13	18.7	11.6	7.9
Consumer goods (nonfood, excluding automobile)	8.80	18.1	22.3	11.3
Consumer durables—manufactured (excluding automotive)	4.05	22.0	25.8	5.3
Consumer nondurables—Manufactured	4.74	16.7	19.0	17.0
Special category, domestic (military type)	3.21	12.9	−13.1	23.4

Source: FT 990, table E-9. (1970 and 1975: Customs value; 1976 and 1977: F.A.S.)

Exports of civilian aircraft have traditionally made an important contribution to U.S. exports. In 1977 civilian aircraft sales amounted to $2.75 billion. However, the general growth of civilian aircraft exports from 1970 to 1977 was considerably lower than the general capital goods rate, averaging only 9.0 percent per year. Aircraft sales grew only 1.3 percent in 1975–76, and fell by 14.3 percent in 1975–77. Developments in 1978, however, indicate that this sector may have an expanding market in coming years.

U.S. sales of consumer goods and automotive vehicles out-performed capital goods sales, and export growth rates since 1975 have been much higher than capital goods rates. These two categories supplied $21 billion in export sales in 1977.

Capital goods sales are "lumpy," often related to large projects with long lead times. The downturn in U.S. capital goods exports since 1975 should not—taken in isolation—be given an undue importance. What does warrant careful consideration is the relatively moderate growth of capital goods exports throughout the 1970s and the rate of import growth. The capital goods export growth rate was below the expansion rate for total U.S. exports in this period, and also below the rate for foods, automotive vehicles, and consumer goods. On the import side, capital goods purchases grew at an average rate of 19.7 percent per year from 1970 to 1977, a growth rate which is one-third higher than the average rate of capital export expansion during this period.

Unfortunately, the end-use classification system which provides a capital goods breakdown is not used by other nations, so direct comparison of United States and foreign country performance in this sector is not possible. It has already been pointed out, however, that the United States has lost market shares for manufactured exports from 1970 to 1976, and examination of high-technology, R+D-intensive manufactured exports by Aho and Carney indicates loss by market shares by the United States. Examining the two-digit breakdowns of the four SITC categories of manufactures for market share changes from 1970 to 1976, Aho and Carney found that only 9 out of the 30 subgroups showed gains. None of these 9 subgroups could be considered R+D intensive.[1] All of the traditionally R+D intensive subgroups lost market shares, and some of the greatest losses occurred in the most technically advanced categories such as chemical elements, plastics, electrical and nonelectrical machinery, transport equipment, and scientific instruments. Aho and Carney conclude:

"Since all of the deviations [indicating changes in market share] for the technically sophisticated products were negative between 1970 and 1976, this implies that those sectors did not reverse any losses caused by the excess demand inflation of the 1960s. In fact, in several of the categories the losses were accentuated even though the dollar was devalued." [2]

Thus, even allowing for the unsteady nature of capital goods sales, the development of U.S. capital goods exports over the past several years indicates that basic changes are occurring in the U.S. competitive position.

Capital goods imports from a relatively small but rapidly growing part of total U.S. imports. Such imports accounted for 9.1 percent of total imports in 1977, but the 1970–77 average annual rate of growth of capital goods exceeded that of any other end-use import category, excluding oil (Table 17). Furthermore, the U.S. has been importing capital goods at a considerably higher rate (19.7 percent per year) than it has been exporting capital goods (15.3 percent per year) for the 1970–77 period. The 1975–76 import growth rate dropped to 13.9 percent, but this climbed to 21.9 percent in 1976–77, higher than that of any other nonpetroleum category except civilian aircraft.

The increasing expansion of U.S. purchases of capital goods from abroad, together with sluggish U.S. exports of such goods, has occurred throughout the 1970s and further underlines the need for analysis regarding competitive developments in this critical part of the manufactured goods sector.

Conclusion: Looking ahead

World trade slowed down more markedly in 1977 than in 1976, and most developed countries experienced minimal economic growth. The United States, with a relatively high domestic growth rate for 1977, enjoyed no real export expansion in the key manufacturing sector. Other major exporting countries, however, not only expanded their exports to the U.S. market, but to an even

[1] The 9 subgroups were: fertilizers, explosives, leather manufactures, wood and cork, paper manufactures, textiles, furniture, handbags and luggage, and footwear.
[2] Aho and Carney, p. 24.

greater extent in markets outside the United States. On the other hand, U.S. imports grew 12 percent in volume compared to 5 percent for Germany and 2.5 percent in Japan. The United States increased its imports of capital goods in 1977 more rapidly than consumer goods.

TABLE 17.—CHANGES IN U.S. IMPORTS BY END-USE CATEGORY, 1970, 1975–77

Category	1977 value (billions)	Percent change		
		1970–77 average annual rate	1975–76	1976–77
Grand total	$146.82	20.0	25.7	21.7
Foods, feeds, and beverages	8.49	4.7	19.9	14.6
Industrial supplies and materials	75.62	25.0	25.0	24.1
Petroleum plus petroleum products, ex. gas	41.38	47.2	28.2	30.2
All other industrial supplies plus mat	34.24	15.7	21.7	17.5
Capital goods, ex. automotive	13.35	19.7	13.9	22.0
Electric Machine, ex. consmr, plus pts	4.56	24.0	30.6	21.0
Nonelec mach, ex. consmr; transp equip, excl. auto plus aircraft; pts plus attach, n.e.s	8.20	18.0	9.6	21.1
Mach tools plus mt wkg plus pts	.54	16.1	−0.2	22.2
Constr, text, plus other spec Indl mach, plus pts	1.53	16.0	8.7	30.7
Indl nonelec mach, eng, plus pts, n.e.s., incl pumps, compressors, bearings, material handling eq, nonmtl wkg mach tools, etc	2.51	19.1	8.3	21.4
Tractors (nonfarm), pts plus attach	.07	12.9	−33.0	−31.9
Tractors (farm plus garden), pts plus attach	.66	20.0	7.1	20.6
Ag mach plus pts, ex tractors plus pts	.52	16.4	4.4	2.1
Bsns mach, incl office, computing copying, etc	1.51	18.1	26.1	17.5
Scientific, prof, plus service-industry eq plus pts; misc transp eq, n.e.s	.88	20.0	12.7	32.9
Civilian aircraft, engines and parts	.59	17.6	−25.8	45.2
Automotive veh, pts, plus engines	18.67	17.7	38.4	15.6
Consumer goods (nonfood), ex. auto	22.42	16.8	34.4	21.8
Consumer nondurables—mfd	8.38	16.0	36.8	12.0
Consumer durables, ex. auto—Mfd	12.29	17.1	32.3	27.3

Note: 1970 and 1975: Customs value; 1976 and 1977: FAS.

Source: Commerce Department, FT 990, table 1–10 (1970), table 1–5 (1976–77).

It thus appears that basic difficulties may be surfacing in the industrial sector. Are rising capital goods imports and stagnant capital goods exports, for example, different aspects of a more fundamental underlying problem—low rates of capital investment in the United States? How important are foreign government export promotion programs, i.e., export-led growth policies to pay for oil imports and overcome unemployment? What of the role of interventionist government industrial policies designed to create high technology industries? Or state-trading or public sector projects in which governments intervent to determine trade flows and select buyers and sellers?

Until now, insufficient analysis has been devoted to the changing roles and composition of the manufactured goods sector in the U.S. trade deficit. Export expansion programs, import policies, conceptual approaches to economic adjustment and strategies of economic development in the United States—each of these policy areas may benefit from in-depth examination of current changes in trade in the manufacturing sector.

A more definitive understanding of the current trade deficit—not to mention policy recommendations designed to alleviate it—must include an evaluation of the relatively new development which this report has highlighted—the manufacturing sector's loss of market shares abroad, and at home as well.

STATISTICAL APPENDIX

Trade balance figures and market share data are extensively used in this report, rather than absolute figures for exports and imports in order to overcome to the extent practicable the "money illusion." Inflation, of course, simply exaggerates the size of imports and exports.

Two classification systems are used in this report. The Standard International Trade Classification (SITC) was developed by the United Nations and is used by most trading nations of the world. It includes the following categories:

0 Food and Live Animals.
1 Beverages and Tobacco.
2 Crude Materials, except Fuels—Inedible.
3 Mineral Fuels, Lubricants, and Related Materials.
4 Oils and Fats-Animal and Vegetables.
5 Chemicals.
6 Manufactured Goods Classified Chiefly by Material (including paper, textiles except fibers and apparel, iron and steel).
7 Machinery and Transport.
8 Miscellaneous Manufactured Articles (including clothing, footwear, scientific instruments, clocks and musical instruments).
9 Commodities and Transactions not classified according to Kind (U.S. goods returned and shipments under $251).

The second system used in this report is the "end-use" classification, a U.S. government system based on combinations of two or more numbers of the Tariff Schedules of the United States Annotated. End-use categories are not used by other nations. However, they have the advantage of distinguishing between capital goods and consumer goods, and they are therefore useful in this type of study. End-use categories include:

Foods, Feeds and Beverages.
Industrial Supplies and Materials (including fuels, paper, textile supplies, iron ore and steel scrap, and iron and steel manufactures).
Capital Goods, except Automotive.
Automotive Vehicles, Parts, and Engines.
Consumer Goods (Nonfood), except Automotive.
Imports, Not Elsewhere Stated (including military aircraft and U.S. goods returned).

Geographical breakdowns follow the terminology established by the Department of Commerce, "Guide to Foreign Trade Statistics 1975," page 201.

An Econometric Analysis of the Structure of Manufactures Trade for the United States, Germany and Japan, 1964–76*

(By C. Michael Aho and Richard D. Carney)

The United States trade balance showed a record deficit of $26.7 billion in 1977. Meanwhile, Japan has been recording record surpluses and Germany's balance of trade has also been positive. Some analysts have attributed the U.S. deficit to the large volume of oil imports, but the United States had a trade deficit in manufactures during the fourth quarter of 1977, and it has continued through the first two quarters of 1978. Apparently oil is not the only contributing factor.

Other analysts have attributed U.S. deficits to cyclical factors. Imports are large because of high aggregate demand in the United States and exports are low because of deficient aggregate demand overseas. According to these analysts, if aggregate demand were to rise overseas, the U.S. trade balance would improve, and there would be no reason for concern. Further, it is suggested that since the recent depreciation of the dollar will increase the volume of U.S. exports and reduce the volume of imports over the next 1½ to 2 years, explicit policy measures are not needed.

These macroeconomic analyses overlook what is happening to the composition of U.S. exports and imports. This paper examines the structure of trade in

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*The authors are assistant professor of economics at George Washington University on leave as a consultant, Office of Foreign Economic Research, Department of Labor and international economist, Data Resources, Inc., respectively. This paper presents the preliminary results of a larger study in progress. The discussion of the problems of a secular decline in U.S. export performance is discussed in more detail in Aho (1978) and Aho and Carney (1978). The views expressed in this paper are those of the authors and do not necessarily reflect those of the Department of Labor or Data Resources. The availability of the OECD Trade Series C data on line through Data Resources made this analysis possible and much less laborious.

manufacturing for the United States, Germany, and Japan to see whether the deterioration of U.S. dynamic comparative advantage widely discussed during the 1960s has continued into the 1970s, and if it is partially responsible for the lagging U.S. trade performance.

The first section briefly summarizes the historical record and reopens the debate whether the decline in the U.S. trade position during the latter 1960s was due to a secular decline in U.S. comparative advantage. Opponents of that view claimed the deterioration was due to excess credit creation in the latter 1960s. If the U.S. net export position had deteriorated because of excess credit creation, then devaluation of the dollar should, with a lag, reverse the deterioration.

Aggregate data on overall manufacturing trade are presented in the first section and the export performance of the major industrial countries is examined. A constant-market-share is used as the basis for the comparison of export performance. The competitiveness measure derived from the market-share analysis is then compared with price and exchange rate indices to see how the structure of trade has been affected by movements in price levels and exchange rates. In addition, the competitiveness measure is also compared with other factors, such as the growth of investment and productivity, which affect comparative advantage in the long run.

According to theory, the commodity composition of trade is determined by differences in factor endowments and by international differences in technology. However, national differences exist in productivity growth, relative investment outlays, and R&D expenditures, and in recent years the United States has one of the poorer records in these areas.

Comparative advantage does not remain constant and if U.S. comparative advantage in manufacturing, relative to Japan, Germany, and the other industrial countries, is deteriorating because of inadequate investment or a reduction in R&D effort, then depreciation of the dollar may only provide temporary relief. It will not correct the underlying problem. Thus, one test whether the recent U.S. trade performance in manufacturing is due to longer-term shifts in comparative advantage is to analyze how the structure of trade has changed, if at all, since the exchange rate realignments If there has been a change in the structure of trade in the post-devaluation period, that would be consistent with the hypothesis of a secular decline.

In order to conduct a statistical test of structural change, disaggregated industry data are needed. The second section contains an econometric analysis of the commodity composition of manufacturing trade from 1964 to 1976 for 92 three-digit SITC categories.

The methodology utilized is the same as that used by Hufbauer (1970), Finger (1975) and, most recently, Branson and Monoyias (1977). Several dependent variables are used to represent the commodity composition of trade and "revealed" comparative advantage. The independent variables are basically the same as those used by Hufbauer, Finger, and Branson and Monoyias to capture the characteristics of the commodity composition of trade.

Trade for the United States, Japan and Germany are analyzed for the time periods 1964–66, 1969–71, and 1974–76. Because of a lack of comparable cross-country data, U.S. industry characteristics are used as the independent variables. They are designed to distinguish between the factor proportions and neotechnology explanations of the pattern of trade. Our objective, however, was not to test the various explanations of trade patterns, but to use the variables to test for changes in the structure of trade over time. Such an assessment of possible changes in the composition of manufacturing trade should be useful for decision-makers because policy measures may need to be taken now.[1] Otherwise, if U.S. comparative advantage in manufacturing is suffering from a structural deterioration, the full effects would not be fully realized for five to ten years.

The final section summarizes our results, makes tentative policy recommendations, and gives suggestions for future research.

I. MANUFACTURING TRADE PERFORMANCE OF THE MAJOR INDUSTRIAL COUNTRIES, 1965–76

The United States emerged from World War II relatively unscathed with its capital stock intact and with a comparative advantage in research and development. Numerous studies have shown that technological factors (R&D expendi-

[1] The issue has already been raised in some policy circles, in particular in the U.S. Senate (1978) which held a series of hearings on export policy. The first section of this paper is largely based upon the author's submission to those hearings.

tures, human capital) characterize United States exports.[2] As the reconstruction of Europe and Japan proceeded, the United States lost many of its traditional exports to these rapidly expanding economies. Expanded markets overseas enabled local firms to achieve economies of scale, and during the 1950s elastic factor supplies kept costs down. Productivity increases overseas were not matched by cost increases.

As the storehouse of United States technology was depleted, the gap between the United States and the rest of the world narrowed, and its export surplus should have also been reduced. With technological change, however, the United States could maintain an export surplus, as long as it continued to expand its export bundle through the development of new technologies and products.

Although there was dramatic growth in Europe and Japan through capacity expansion and increases in efficiency, this confluence of economic structures was not fast enough to eliminate the United States' balance-of-trade surplus during the 1950s and 1960s. The line between traditional exports and imports was moving against the United States as more products could be produced relatively cheaply overseas, but the United States kept expanding its export bundle through technological advance.

The U.S. surplus on merchandise trade peaked in 1964 and declined thereafter, finally becoming negative in 1971. By the end of the 1960s, Germany and Japan were recording record trade balance surpluses. There was considerable discussion at the time whether the deterioration in the U.S. trade balance was the result of excess credit creation in the United States or if it reflected a continued secular decline in U.S. comparative advantage.[3]

Figures 1 and 2 compare the United States', United Kingdom's, Germany's, and Japan's trade shares in manufactures and in technology intensive commodities as a percentage of industrial country exports.[4] The decline in the U.S. share of both total manufacturing and technology intensive manufacturing exports is evident in the figures.

The U.S. share of manufactured exports fell from almost 22 percent in 1962 to 15–16 percent in the 1970s. Germany's share rose above 20 percent in the early 1970s before declining back to its historical level of 18–19 percent.

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[2] See for example Kessing (1966), Gruber, Mehta and Vernon (1967), Hufbauer (1970), Baldwin (1971), Branson (1971), Morrall (1972), Katrak (1973), and Lowinger (1975, 1977), Finger (1975) and Branson and Monoyias (1977).

[3] Several authors have argued that the deterioration in the trade account was the result of systematic technical change. Samuelson (1964, p. 153), in commenting on U.S. balance of payments problems, spoke of the "technological miracles of growth abroad" and the "reducing of the technological gap."

More recently, Kindleberger (1974) attributed the deterioration to the loss of dynamic comparative advantage as the U.S. failed to develop new sources of comparative advantage as it lost old sources. He suggested that the United States economy was undergoing a climacteric while the Japanese economy was in ascendency. According to Kindleberger, sometime during the last ten to fifteen years the United States research-and-development structure ceased to develop new export possibilities fast enough to maintain the technological gap. What began as imitation overseas gave way to the development of new products and processes. See Gilpin (1975) for a review of the discussion.

[4] Technology-intensive products here are defined broadly as in Gruber, Mehta and Vernon (1967). The five industries which Gruber, Mehta and Vernon identified as the most research and development intensive were transport equipment (SIC 37, SITC 73), electrical machinery (SIC 36, SITC 72, 891.1 and 891.2), instruments (SIC 38, SITC 86 plus the remainder of 89), chemicals (SIC 28, SITC 5 plus 651.6 and 281), and non-electrical machinery (SIC 35, SITC 71). The numbers in parentheses give the concordance between the United States Standard Industrial Classification and the SITC. Chemicals was first when research effort is measured by scientists and engineers as a percentage of total employment with 4.1%. It was followed by electrical machinery (3.6%), instruments and transport equipment (both at 3.4%) and non-electrical machinery (1.4%) which placed sixth behind petroleum and coal (1.6%) on this measure. The overall average for manufacturing was 1.1%. Using research and development expenditures as a percentage of sales, chemicals was fourth with R&D expenditures 3.9% of sales. Transport equipment was first (10.0%) followed by electrical machinery (7.3%), and instruments (7.1%). Non-electrical machinery was fifth with R&D expenditures 3.2% of sales. The average for manufacturing was 2.0%. Later studies by Gruber and Vernon in Vernon, ed. (1970), and Lowinger (1975) have used similar rankings.

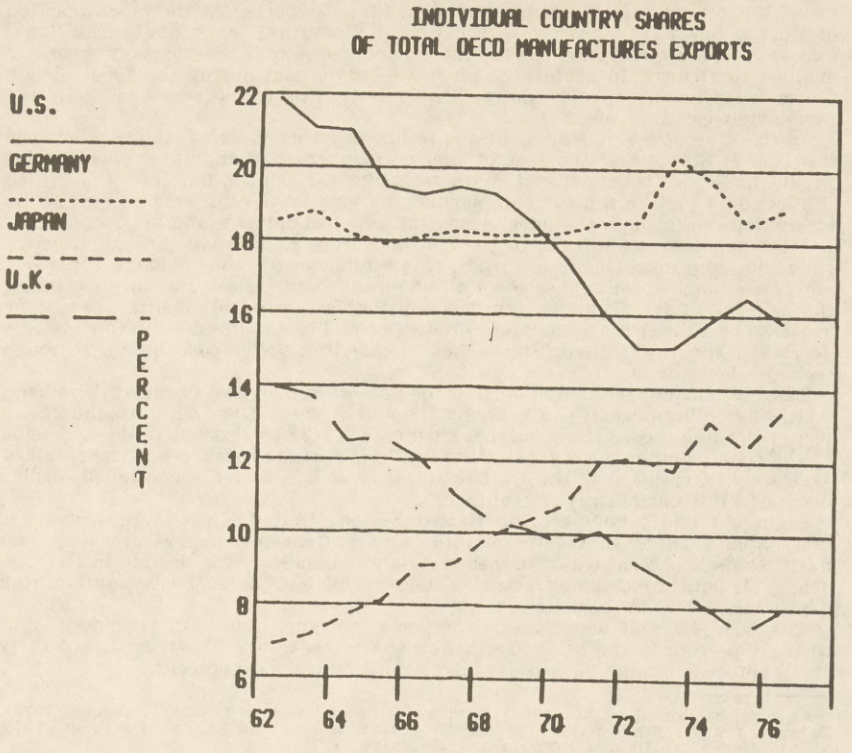

FIGURE 1

Source: OECO trade series C.

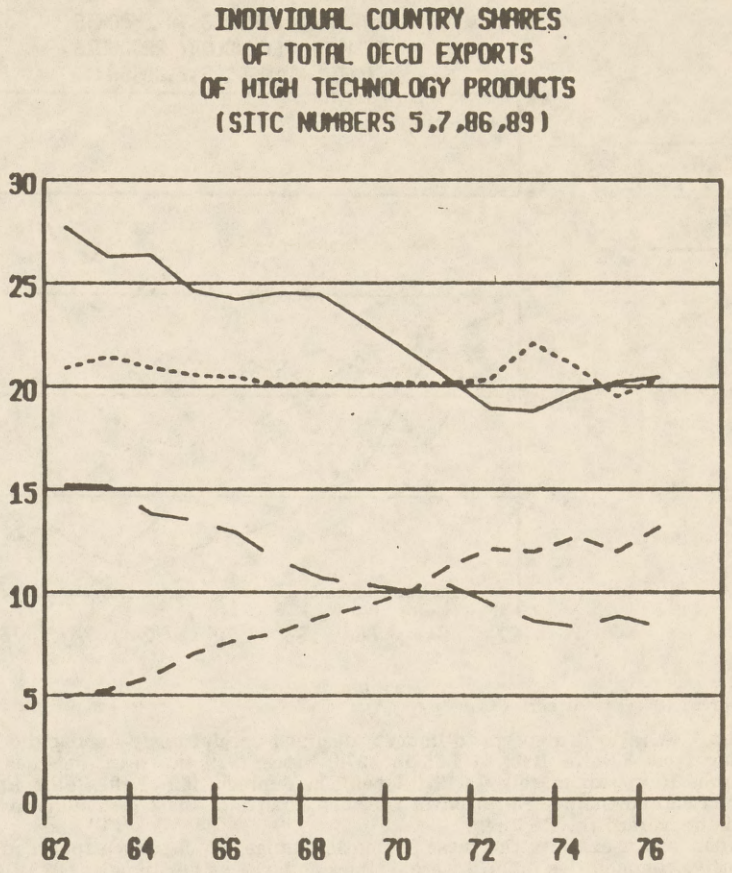

FIGURE 2

Source: OECO trade series C.

The most dramatic changes occurred with Japan and the United Kingdom. Japan's share rose from 7 percent in 1962 to 13–14 percent in the 1970s. The U.K.'s share of manufactured exports has declined steadily from a high of 14 percent in 1962 to approximately 8 percent in 1975 and 1976.

The results were similar in technology intensive manufactures which account for 75 percent of U.S. exports. Between 1962 and 1970, the U.S. share declined from 27.6 percent to 21.7 percent and stood at 20.5 in 1976. Although the U.S. decline has slowed since the devaluation of the dollar, the United Kingdom has not been as fortunate. Between 1962 and 1970 the U.K.'s share decreased from 15.2 percent to 10 percent. The decline continued steadily after 1970 reaching a low of 8.3 percent in 1976 even though the pound depreciated by 34 percent on an effective exchange rate basis.

Meanwhile, the German share of technically sophisticated products has been remarkably stable. Japan's share, on the other hand, has gained steadily since 1962. Even with the price and cost changes that have been wrought by the exchange rate realignments Japan increased its share from 9.9 percent in 1970 to 13.2 percent in 1976.

An alternative measure of trade performance is to examine net exports or the ratio of exports to imports. Figure 3 contains a plot of the ratio of exports to imports in the R&D intensive commodities for the same four countries.

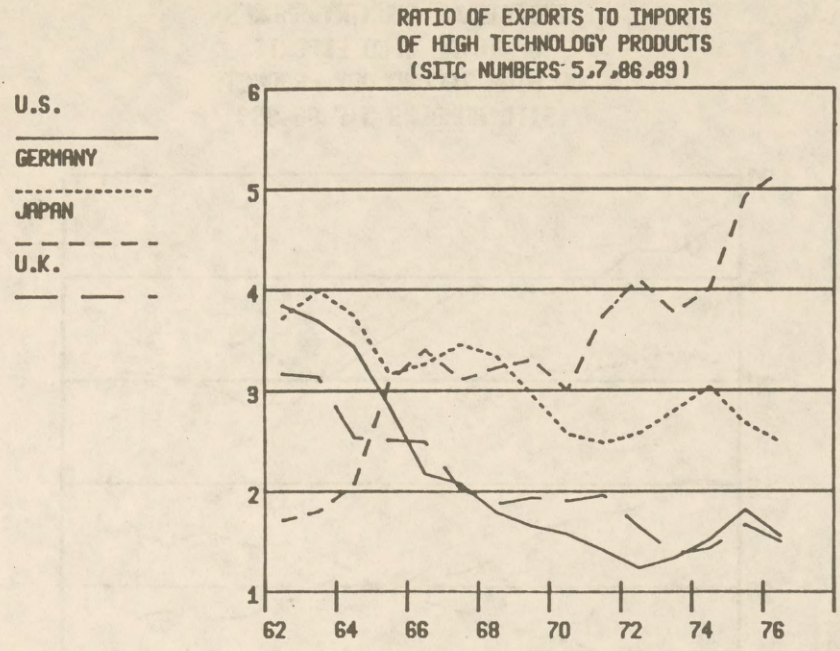

FIGURE 3

Source: OECO trade series C.

The U.S. ratio of exports to imports declined precipitously during the 1960s, falling from 3.84 in 1962 to 1.58 in 1970. Since 1970 the ratio declined, then returned to approximately its 1970 level. The depreciation of the dollar appears to have halted the deterioration in U.S. net exports of these commodities, but it has not reversed the decline.

Japan again exhibits the most dramatic change, as Japan's exports of R&D intensive commodities in 1976 were 5 times as large as her imports. In 1970 they were only 3 times as large. This suggests that Japan has been very successful in expanding her exports of these commodities relative to her imports. Germany's ratio is largely unchanged, while the decline in the U.K.'s ratio is consistent with the decline in her market share.

Although we would expect the U.S. share of global exports and its trade balance to decline while foreign countries were in the process of rebuilding, the reconstruction was largely accomplished by the early 1960s. Why then did the declines continue and accelerate in the latter 1960s?

The disagreement which is the important question in this analysis is whether the deterioration of the United States' net export position in the latter 1960s was due to monetary factors through increases in credit creation in the United States, or whether it was due to structural factors and technological change. If the deterioration was a one-time loss due to excess demand an inflation, then the depreciation of the dollar will reverse the trend. However, if the deterioration in the United States trade balance was due in part to systematic technical change and a loss of dynamic comparative advantage, then devaluation of the dollar will not reverse the trend or correct the underlying cause.

Table 1 contains data on price and exchange rate indices over different periods. During the latter 1960s, the U.S. export price index rose relative to most of the other major countries. At the same time, however, the increases in productivity, and real investment expenditures were smaller in the U.S. than in most countries overseas. Table 2 contains the changes in these variables over different time periods.

Studies of longer-term trends of U.S. trade done in the early 1970s concluded that the deterioration was the result of structural changes in the U.S. competitive position. For example, Branson and Junz, (1971, p. 355) concluded:

". . . while aggregate demand factors were important in the late 1960s, a structural movement underlies the changing U.S. trade position, operating independently of the state of aggregate demand."

TABLE 1.—INDICES EXPORT PRICES AND EXCHANGE RATES

[Period to Period Percent Change]

	Export prices [1]				Dollar exchange rate [2]				Export prices adjusted by dollar exchange rate [3]				Effective exchange rate [4]			
	1965–1970	1970–1973	1973–1976	1970–1976	1965–1970	1970–1973	1973–1976	1970–1976	1965–1970	1970–1973	1973–1976	1970–1976	1965–1970	1970–1973	1973–1976	1970–1976
United States	16	24	47	82	----------				16	24	47	82	----------	−18	6	−12
Germany	6	7	26	34	10	38	5	45	17	47	32	95	NA	19	11	32
Japan	13	7	38	47	1	32	−9	21	14	41	26	78	NA	24	−6	16
United Kingdom	25	26	91	140	−14	2	−26	−25	7	29	41	81	NA	−12	−24	−34
France	20	18	45	71	−11	25	−7	16	6	47	35	98	NA	6	−2	4
Italy	8	27	94	146	0	8	−30	−24	7	36	36	86	NA	−10	−29	−36
Belgium	11	8	36	47	0	28	0	29	11	38	37	89	NA	4	3	7
Netherlands	4	10	43	57	0	30	5	37	4	43	50	115	NA	6	10	16
Canada	14	19	51	79	3	4	2	6	18	24	53	89	NA	−1	4	3

[1] Line 74.
[2] Line ahx.
[3] Line ahx/line 74×100.
[4] Line amx.

Source: IMF, International Financial Statistics.

TABLE 2.—INVESTMENT AND PRODUCTIVITY

	Investment/GDP ratio (average percentage over period) [1]				Rate of growth of real investment [2]				Productivity (period to period percent change) [3]				Industrial productivity (1970 equal 100) (period average) [4]			
	1965–1970	1970–1973	1973–1976	1970–1976	1965–1970	1970–1973	1973–1976	1970–1976	1965–1970	1970–1973	1973–1976	1970–1976	1965–1970	1970–1973	1973–1976	1970–1976
United States	18.1	18.1	17.3	17.6	5.2	3.1	2.6	2.9	6.4	14.3	3.5	18.3	101	105	107	105
Germany	24.4	25.6	22.0	23.7	2.2	4.4	2.8	3.6	30.0	18.9	17.2	39.3	89	107	119	113
Japan	32.9	35.1	32.8	33.6	9.8	13.5	10.9	12.2	85.2	25.8	39.7	39.7	78	110	127	117
United Kingdom	18.6	18.7	19.8	19.3	4.5	3.7	3.0	3.4	18.0	17.4	−2.0	14.9	93	104	104	103
France	24.6	23.6	23.7	23.6	6.9	7.3	6.5	6.9	36.9	17.3	8.0	26.7	93	109	119	113
Italy	19.8	20.5	21.1	20.8	1.4	3.7	3.2	3.4	28.6	25.5	4.2	30.7	92	103	109	106
Belgium	22.0	21.6	NA	NA	4.1	3.8	3.9	3.9	NA	NA	NA	NA	88	NA	NA	NA
Netherlands	25.5	24.4	21.4	22.9	6.6	5.9	4.1	5.0	NA	NA	NA	NA	82	113	135	123
Canada	22.4	21.6	23.0	22.3	8.2	4.9	5.6	5.3	22.0	14.8	5.2	20.7	90	109	118	113

[1] IMF, International Financial Statistics, line 93e/line 99b.
[2] OECD, National Income Accounts.
[3] International Economic Report of the President, 1977.
[4] IMF, International Financial Statistics, line 66c/line 67c.

Several factors have been cited as possible causes of a secular decline. One is the fall in rate of productivity growth in the United States relative to other major countries.[5] Of the nine countries in Table 2, the United States had the smallest increase in industrial productivity between 1965 and 1970, and the second smallest increase, behind the United Kingdom, between 1970 and 1976. The ranking was the same for productivity, measured as output per manhour, for the seven countries for which data were available.

The relative productivity decline in the United States has been attributed to changes in the industrial structure, in particular to the large shift towards industries with low productivity growth such as services and government. Another possible source of the relative decline in output per man-hour is the lower rate of investment in the United States. Table 2 compares gross private domestic investment expenditures as a percentage of GDP in the major countries. The United States has the smallest percentage of GDP devoted to investment at 17–18 percent while Germany allocates 25 percent and Japan allocates more than 32 percent of gross domestic product to investment. The United Kingdom has the second smallest percentage with 18–19 percent. Note that real investment growth is also consistently smaller in the United States and the United Kingdom than in Japan.

Technological change also could have caused the differences in productivity growth. Historically, the United States, in absolute terms, committed more resources to research and development effort than any of its major competitors. Even relative to total national resources the United States R&D effort was greater than overseas.[6] That has changed, however, since the later 1960s.

Between 1963 and 1971, all of the major countries increased their share of GNP allocated to R&D except the United States and the United Kingdom. Although these data are now seven years old, they indicate a trend which newspaper accounts have suggested is continuing. More recent cross-country data are not yet available, but a recent National Science Foundation study found that U.S. expenditures on R&D in 1975 were only 2 percent of GNP.[7] The current estimate for Germany was 2.3 percent of GNP. Since research and development can be expected to have a lagged influence on trade performance, these data from the early 1970s may be reflected only recently in trade patterns.[8]

The increase in the foreign direct investment activity of the United tates multinational corporations during the 1960s has also been identified as a possible cause

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[5] The growth in output per manhour in the United States, which had averaged 3.1 percent between 1945 and 1955, fell to 2.15 percent between 1955 and 1965 and declined further to 1.88 percent between 1965 and 1971.

[6] During the 1960s the United States devoted more expenditures as a percentage of GNP to R&D than any of the other countries and had more R&D personnel per 1000 in the labor force than any of the other OECD countries. Since then, there have been significant changes in the patterns of R&D among the leading countries. Between 1963 and 1971, U.S. expenditures on R&D only grew by 3 percent annually while R&D personnel also increased by only 3 percent. Germany, on the other hand, had an annual growth rate of expenditures on R&D of 11 percent, while R&D personnel were increasing at a rate of 6 percent per year. Japan's annual growth rate of expenditures on R&D was almost 15 percent during the period, while its R&D manpower was growing at approximately 5 percent. United States expenditures on research and development as a percentage of GNP fell from approximately 2.7 percent in 1963–64 to 2.5 percent in 1970–71, while the number of qualified R&D manpower per 1000 in the labor force increased slightly from 12.9 to approximately 13.6 percent. Germany had the most remarkable change. In 1963 Germany averaged 1.4 percent of its GNP allocated to research and development expenditure and approximately 6.9 of every 1000 workers qualified as research and development personnel. In 1970, 2.1 percent of GNP was expended on research and development and the number of qualified personnel rose to 10.6 per 1000.

[7] Quoted in Michael Lynch, "Backing Off Basics : Many Concerns Stress Product Development and Reduce Research," Wall Street Journal, (October 18, 1977).

[8] These changes in the relative amounts of resources devoted to research and development could explain the difference in productivity growth and the changes in the pattern of trade among the major countries. For a more general discussion of the effects of the decline in R&D on the rate of growth of productivity and on overall economy, see Brimmer (1978). Empirical evidence on the effects of increased R&D on the pattern of trade is lacking but studies of the characteristics of German exports suggest that they are becoming more skill intensive. Stern (1976) found that the human capital content of German trade increased substantially between 1962 and 1969. Using a cross-sectional study of 25 German industries, he found that there was a marked increase in the coefficient on his human capital variable in an equation explaining German trade patterns between the years 1962–69.

The results were confirmed whether the human capital concept was measured in terms of technicians and engineers or as a capitalized variable. These variables were similar to the variables used in studies of United States trade. For example, see Hufbauer (1970), and Gruber, Mehta and Vernon (1967) ; who demonstrated that U.S. exports were characterized by their research and development intensity. Keesing (1966) and Morrall (1972) related U.S. export patterns to the skill intensity of the industry. McCulloch (1978) discussed the role of R&D in determining U.S. trade competitiveness.

of the change in U.S. trade patterns. The hypothesis advocated by labor groups is that U.S. multinational corporations transferred technology overseas, thereby eroding the United States comparative advantage. However, it cannot be conclusively proven that U.S. multinational corporations eroded U.S. comparative advantage, for we do not know what would have happened in the absence of foreign direct investment. These firms may have had little discretion in their decision to invest overseas. They may have been reacting defensively to local firms in the foreign market who were about to capture their market shares.

It is very difficult to separate the effects that these factors had on the pattern of trade from the effects of the Vietnam-era inflation. However, as stated above, if the decline in the U.S. trade balance during the 1960s was, in part, due to these longer-term factors, then dollar depreciation will not correct the underlying causes which are structural and deep-seated.

The remainder of this section compares recent export performance in manufacturing with the historical trend using a constant-market-share analysis. The analysis focuses upon manufacturing as an aggregate. A disaggregated analysis of changes in the commodity composition of manufactures is done in the following section.

Constant-market-share analysis provides a summary measure of a country's export performance vis-a-vis its major competitors.[9] The analysis allows for differences in the commodity composition and market distribution of a country's exports. It decomposes a country's change in exports into the change due to the increase in world trade, due to commodity composition, due to market distribution and due to a residual competitive effect.[10] The competitive residual represents all other price and non-price factors which would influence a country's export performance.[11] This analysis was used to compare the export performance of the leading OECD countries for three separate time periods (1965–70, 1970–73, and 1973–76), to see if and how the realignment of exchange rates affected U.S. export performance relative to other industrial countries. The basic data used were taken from OECD Trade Series C. The countries covered were the United States, Germany, Japan, France, Italy, the United Kingdom, Canada, Belgium-Luxembourg, and the Netherlands. The data were classified according to Standard International Trade Classification (SITC) and were disaggregated to the one-digit level for the manufacturing industries, SITC categories 5 through 8.

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[9] There are many practical and theoretical problems associated with conducting a constant-market-share analyses (CMS). Practical problems include the choice of base years and periods for analysis and the choice of a standard group of countries for comparison. Theoretically, the competitive residual represents the interaction of both supply and demand factors and the general equilibrium system behind them. CMS analysis of export growth has been reviewed by Leamer and Stern (1970), Chapter 7 Richardson (1971) provides a criticism of the technique and presents the results of several sensitivity tests. We have conducted several of those tests in addition to a few others such as changing the time interval. We refrain from cluttering the current discussions with the results of those tests. They are available from the authors upon request. The results included in the text best capture the changes which have occurred.

[10] Trade shares should ideally be measured by netting out each country's imports from the value of trade in each category. To assess competitiveness, countries should be compared in markets where each one of them is on an equal footing. That would require us to eliminate the trade among the nine countries being compared in this analysis. We have not done that because trade among these countries comprises such a large volume of world trade. The disaggregated analysis in the second section does compare trade performance in third markets.

[11] Competitiveness is difficult to define. Both price and non-price factors such as product quality, servicing, etc., determine the ability of a supplier to compete. Price alone may not be indicative of a supplier's competitiveness. Under conditions of limited supply, an increase in demand for a product because of its attractiveness may cause price to rise considerably. See Leamer and Stern (1970) for a discussion.

The analysis was done for the nine OECD countries' exports of manufactures to the fourteen different market areas.[12]

TABLE 3.—COMPETITIVE RESIDUALS FROM A CONSTANT-MARKET-SHARE ANALYSIS OF MANUFACTURING EXPORTS

Period	United States	Germany	Japan	United Kingdom	France	Italy	Belgium-Luxembourg	Netherlands	Canada
1965–70:									
Dollar residual	−1,977	−516	3,825	−4,051	19	255	−286	−284	2,083
Percentage [1]	−16.4	−3.5	37.0	−78.5	.3	4.7	−6.5	−9.1	33.9
1970–73:									
Dollar residual	−6,140	4,857	4,192	−2,871	1,485	−1,487	1,016	1,354	−2,892
Percentage	−39.9	16.4	25.2	−30.9	11.9	−19.8	11.7	19.5	−77.3
1973–76:									
Dollar residual	2,104	−6,245	7,847	−5,439	−1,903	236	−2,028	368	949
Percentage	7.0	−21.4	27.3	−45.4	−12.2	2.0	−26.8	4.5	13.7
1970–76:									
Dollar residual	−7,440	1,575	14,948	−9,890	−139	−1,991	−426	2,506	−3,223
Percentage	−16.3	2.7	33.0	−46.5	−.5	−10.2	−2.6	16.6	−30.2

[1] The percentage residuals are calculated as a percentage of the country's actual increase in exports over the period.

Table 3 contains the competitive residuals in dollar value and percentage terms for the different time periods. The actual change in the country's exports over the period is used to calculate the percentage deviation.

For the period from 1965 to 1970 the United States had the second largest negative residual in percentage terms (−16.4 percent) and also in dollar terms (−$1,977 M). The United States was exceeded only by the United Kingdom. Japan had the largest positive residuals by far ($3,895 and 37 percent).

For the whole period from 1970 to 1976, the United States also performed relatively poorly. The −16.3 percent residual was the third worst, exceeded only by those of the United Kingdom and Canada, while the −$7,440 M was the second worst. Again Japan led on both a dollar and percentage basis. The U.S. results did differ from the two subperiods from 1979–73 and 1973–76. Apparently, the depreciation of the dollar did have some effect, as a result, the United States had its only positive residual (7.0 percent or $2,104 M) between 1973 and 1976. This still was not enough to outweigh the decline for the 1970–73 period since the competitive residual for the whole period was negative.

Two unambiguous results emerge from the constant-market-share analysis. Japan did exceptionally well in all periods despite the appreciation of the yen. The United Kingdom, on the other hand, did very poorly even though the pound

[12] The fourteen trading partners were the U.S., Canada, Japan, Australia-New Zealand-South Africa, EEC9, other developed Europe, developing Europe, eastern Europe and the Soviet Union, Africa, the Caribbean, South America, the Middle East, Central Asia and the Far East and other. The analysis was also done for these individual trading partners and the results are available from the authors upon request. That analysis did reveal some interesting results. Between 1970 and 1973 the U.S. share decreased in 11 of the 13 partner areas. The largest decrease in dollar terms was in the EEC9 where the deviation from constant share was almost −$4 B. In the period from 1970 to 1973, Germany outperformed the U.S. in 11 of 13 market areas and Japan had the advantage in 9 of 12.

The U.S. performance improved over the period from 1973 to 1976, as shares decreased in only 2 of the 13 market areas. The U.S. performance improved with respect to Germany as Germany only outperformed the U.S. in one of thirteen markets. The story is slightly different with respect to Japan. Japan continued to outperform the U.S. in seven of twelve areas. Over the whole period from 1970 to 1976, Japan outperformed the U.S. in eleven of twelve areas even though the yen appreciated by 21 percent relative to the dollar. Japan's adjusted unit value did rise less quickly over the whole period but only slightly less (78 versus 82 percent).

This implies two things: First, one of the factors often cited for the lagging export performance, increased protectionism overseas, cannot explain the superior performance of Japan in markets where they must compete on an equal basis. Secondly, it calls into question the cyclical explanation of U.S. deficits. Obviously, the level of income in foreign markets common to both Japanese and U.S. exporters is the same. The cyclical explanation still has validity to the extent low aggregate demand in Japan makes more goods available for export, but that should already be reflected in the export unit values.

was devalued in 1967 and depreciated in the aftermath of the collapse of the Bretton Woods system. The U.K.'s competitive residuals in dollar terms ranged from —$2.6 B to —$5.6 B. Japan had residuals ranging from $3.8 B to $7 B.

Germany's performance was mixed. Competitiveness residuals were positive and large between 1970 and 1973, but they were large and negative between 1973 and 1976. Still, Germany was able to hold her 1970-share despite the sustained appreciation of the D-Mark amounting to 32 percent on an effective exchange rate basis. After Germany's export unit values are adjusted for exchange rate changes, Germany had one of the largest increases in unit value witnessed over the period.

This analysis provides suggestive evidence that substantial changes had occurred in the United States trade patterns during the 1960s and that these changes have persisted since the two dollar devaluations. If the United States deterioration on the trade account had been due to a one-time decrease because of excess demand inflation in the United States, one would have expected that the trade shares of the United States would have increased (or stabilized) after the substantial devaluation of the dollar with respect to the major currencies. This trade share analysis demonstrates that as of 1976, the United States had not regained its 1970 share of manufactures exports.

Some analysts have attributed this to a lack of competitiveness.[11] One of the most important factors by which competitiveness is traditionally measured is changes in relative prices. Changes in relative prices have generally been in favor of the United States and the United Kingdom in recent years (see Table 1). Nevertheless, both of these economies have had lagging export performances as measured by our constant-market-share analysis.

Apart from changes in relative prices, several non-price, structural factors could be responsible for the lagging U.S. export performance. In addition to the factors mentioned above, other include government regulations on U.S. industry, a lack of aggressiveness on the part of U.S. exporters and protectionism abroad. These variables are difficult to quantify and often it is impossible to identify what influence they exert. For example, aggressiveness is a factor often cited for the superior performance of Japanese and German exporters, but, it is difficult to separate out aggressiveness in marketing from other non-price factors such as product quality and performance.

On the other hand, price, productivity and investment activity can be quantified and used to try to explain observed changes in market shares. Leamer and Stern (1970) suggest that the residues from a constant-market-share analysis could be used as a dependent variable to be explained by changes in relative prices and other factors which would affect the size of the competitive residuals.[13]

The hypothesis of a secular decline implies that the decline in U.S. export shares in the latter 1960s which continued at a more moderate rate in the 1970s, reflects more than a change in price levels. Systematic technical change and international differences in productivity growth could cause U.S. comparative advantage to decline over the longer term. The lower rate of growth of investment and industrial productivity, the smaller share of material resources devoted to investment and the decline in R&D effort—all structural factors—could influence the pattern of comparative advantage over the longer run.

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[13] Leamer and Stern (1970, p. 180) separate possible factors into demand and supply influences. On the demand side, the competitive effect could represent: (1) differential rates of export price inflation, (2) differential rates of quality improvement and the development of new exports, (3) differential rates of improvement in the efficiency of marketing or financing of exports sales and (4) differential changes in the ability for prompt fulfillment of export orders. Supply side factors will also affect the residual, including: (1) differential rates of monetary inflation (affecting production costs), (2) differential growth rates of available productive factors and the responsiveness of export supply to the domestic supply of these factors, (3) differential rates of productivity increase, and (4) the extent to which the country is concentrated in exports to rapidly growing markets.

In order to test whether price or non-price factors are responsible for recent changes in trade patterns, a simple linear regression was set up to try to explain the competitive residuals derived from constant-market-share analysis. The residuals were related to adjusted unit value indices (from Table 1), industrial productivity (Table 2) and the share of investment in GDP (Table 2). Theory would predict that the residuals would be negatively related to price and positively related to increases in productivity and the share of investment in GDP (in part proxying the "newness" of the industrial base).

Equations 1–4 contain the results for the 1970s for manufacturing. Similar results were obtained for the 1960s so that we confine our attention to the more recent period which included the exchange rate realignments.

(1) $$RES = -.29 + .03\ AXPI + .52\ IGDP \quad (1970\text{–}76)$$
$$(.24) \quad (5.01) \quad R^{-2} = .91$$

(2) $$RES = .02 - .13\ AXPI + .49\ IGDP \quad (1970\text{–}73)$$
$$(.38) \quad (3.04) \quad R^{-2} = .53$$

(3) $$RES = .08 - .18\ AXPI + .19\ IP \quad (1973\text{–}76)$$
$$(2.30) \quad (2.60) \quad \bar{R}^2 = .41$$

(4) $$RES = .01 - .36\ AXPI + .27\ IGDP \quad (1973\text{–}76)$$
$$(2.89) \quad (3.54) \quad R^{-2} = .63$$

RES is the residual in manufacturing from Table 3 deflated by the increase in OECD exports (/1000), AXPI is adjusted unit value, IP is industrial productivity, and IGDP is the investment-GDP ratio. Equations (1) and (2) use concurrent values. Equations (3) and (4) use lagged values.

Although these results are obtained from a very limited sample, eight observations for each period, they suggest that non-price factors are important. The industrial productivity or investment-GDP variable entered significantly with the correct sign in every equation while the price variable did not. The results for the period after 1973, when the largest changes in adjusted unit values occurred, showed that both price and structural components were correlated with the residuals. The higher the AXPI, the smaller was the residual. But, in addition, those countries with higher IP or IGDP had larger positive residuals.

These results are consistent with the hypothesis of a secular decline and lend support to the importance of structural factors. However, we would be remiss if we did not qualify the results. With so few observations, outlying values for one or two countries can greatly influence the results. Two outliers come immediately to mind, the United Kingdom and Japan.

Japan has the largest positive residual concurrent with the highest IGDP ratio and largest increases in industrial productivity. On the other hand, the United Kingdom has one of the lowest IGDP ratios and low rates of productivity increase, while consistently having the worst export performance record.

An alternative form of evidence would have been a close comparison of the two countries' performance. In either case the conclusion would be the same, that structural factors are needed to explain the recent changes in the pattern of trade. Unfortunately this analysis does not enable us to identify with certainty which structural factors are important. In order to do that, a more detailed analysis of disaggregated trade data is needed. We turn now to a more detailed commodity breakdown to determine whether these results are confirmed at a disaggregated level.

II. AN EMPIRICAL ANALYSIS OF MANUFACTURING TRADE AT A DISAGGREGATED LEVEL

The hypothesis of a secular change in the pattern of trade in manufacturing was set out above. As Japan and the countries of Europe rebuilt they gradually eroded U.S. comparative advantage in manufacturing. The question is whether that trend is continuing.

U.S. comparative advantage has traditionally been associated with research and development, human skills, and sometimes, the capital intensity of production. Proponents of the product cycle stress the dynamic nature of trade including product development, imitation and differentiation. Industrial organization

theorists stress economies of scale and industry concentration.[14] This section tests whether there has been a change in the pattern and composition of trade in manufactures since the mid-1960s. In particular, have the characteristics of U.S. manufacturing exports and imports changed significantly over time? With the rapid growth of investment and increased R&D effort overseas, has the composition U.S. manufacturing trade changed? If there has been a change in the structure of manufacturing trade, this would be consistent with the hypothesis of a secular decline.

This section examines the industrial characteristics of trade in manufacturers at a disaggregated level for the United States, Japan and Germany for 1964–76 and tests for changes in structure. This analysis, however, does not attempt to identify what may have caused any observed changes in structure, it only tests if changes have occurred. It should also be emphasized that our objectives was solely to test for changes in the composition of manufacturing trade. Although the independent variables employed represent the important variable often used to distinguish between different theories of trade, we do not use them to test trade theory hypothesis.[15] Trade patterns are first compared by examining the characteristics of national exports and imports on a unilateral basis for three different time periods. Then bilateral comparisons are made by examining the structure of one country's exports to a third market area relative to the exports of a second country to the same market area.

This bilateral comparison has the advantage of being able to distinguish relative changes in the characteristics of trade. For example, both Japan's and Germany's exports may be characterized by their capital inputs on a unilateral basis but this procedure allows a test of which country's exports are relatively capital intensive. Further, when their exports to each other are netted out it enables a test of relative factor intensity in markets where they both compete.

The first test for changes in trade patterns involved cross-sectional regressions of nine variables of industry characteristics on various measures of trade patterns or performance for the United States, Japan, and Germany unilaterally. The regressions were done for three separate time periods, 1964 to 1966, 1969 to 1971, and 1974 to 1976. Three-year averages were used to smooth out short run fluctuations. The uniqueness of this analysis comes from the use of recent trade data covering the period through 1976. In addition, regressions were conducted on changes in the levels and on rates of growth.

This analysis was conducted using U.S. industry characteristics for 92 three digit SITC categories in manufacturing.[16] The independent variables included a measure of human capital (H), labor (L), capital stock (KB), research and development (RD), rate of product turnover (T), first trade date (FT), consumer goods ratio (CG), product differentiation (PD), and economies of scale (ES).

The variables, for the most part, cover the period for 1965–67. H, L, and KB are taken from Branson and Monoyias (1977) who updated Hufbauer's (1970) data to 1967. FT, CG, PD and ES are all taken from Hufbauer's original article. The only difference being FT, which is the actual average first trade date not the average subtracted from 1965 as he had done. The rate of product turnover, T. was taken from Finger (1975). RD is defined on a product basis as the commitment of R&D funds in a product category as a percentage of shipments in that category. It is derived from Kelly (1977). A more detailed description of the variables and their sources is contained in the appendix.

Several dependent variables were used to represent the commodity composition of trade. They include exports (X), imports (M), net exports (X–M), changes in exports and imports and growth rates of exports and imports.[17] In addition, three measures which normalize for industry or national factors were

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[14] Trade and industrial organization have recently been joined by Caves and Shirarzi (1977) and Pagoulas an dSorensen (1976). They include market structure variables, profitability and concentration ratios. No attempt is made here to include those variables at this time.

[15] For a survey of the literature on testing trade theories see Stern (1976). Branson and Monoyias (1977) also set forth several of the unanswered questions.

[16] This analysis follows Branson and Monoyias in excluding the following three-digit manufacturing categories; 515, 532, 621, 633, 667, 697, 863, 896, 688, and 726.

[17] Lacking a consistent deflator for Japan and Germany, the regressions were conducted on the levels of X, M and X–M. Branson and Monoyias (1977), however, found that scaling did not affect their results. In addition, several scale-free dependent variables were used as described presently.

also used. They were exports as a percentage of gross trade (X/X+M) and two indices of "revealed" comparative advantage.

RCA1 is the ratio of exports to imports in a category divided by the country's overall export-import ratio in manufacturing.[18] That is, comparative advantage in an industry is indicated if the export-import ratio surpasses the respective value for all manufacturing. RCA2 is an index number defined as the country's market share in an industry divided by that country's share of overall manufacturing exports.[19] Thus, an index number of 120 will mean that the export share of the particular country in the commodity category in question is 20 percent higher than its share in the total exports of manufactures. RCA2M is similarly defined for imports. The analysis also examined changes in these indices and exports as a percentage of gross trade over time.

The trade data were taken from OECD trade Series C. Each country's exports and imports were with the entire world, except in the bilateral comparisons where exports to a third market are compared. Where market shares are needed to normalize, as in RCA2, the OECD was taken as the universe of competitors.

In summary form, the results of the unilateral analysis by country are as follows:

United States comparative advantage continues to lie in the R&D intensive sectors. Economies of scale and, surprisingly, labor also characterize U.S. comparative advantage, while the United States appears to have a growing disadvantage in the capital-intensive industries and in the consumer goods industries. The results for industries characterized by product differentiation were mixed.

Japan's structure of manufacturing trade is characterized by human and physical capital. Japan tends to import products in labor- and R&D-intensive industries. Of the three countries, Japan showed the most pronounced changes over the period. Indicative of the change was the shift from consumer goods at the beginning of the period to the "newer products" and to the capital-intensive sectors at the end of the period. *Germany's* commodity composition of trade was the most puzzling. Both exports and imports were positively related to capital and labor intensity. Germany, however, did consistently appear to be an importer of R&D-intensive products and an exporter of differentiated products and those related to scale economies. Also like Japan, Germany had moved from consumer goods into the "newer" products measured by first trade date.

Complete regression results for all dependent variables, all periods and all three countries are given in Appendix Tables 1–3. What follows is a brief summary of the results for each independent variable.

The most remarkable results with respect to the measure of human capital (H) was that it was not significant in any of the regressions for the U.S. This is in contrast to the results obtained by Branson (1971) and Branson and Monoyias (1977). Similarly for Germany, H was not significantly related to exports in any form contrary to the results obtained by Stern (1976) and Wolter (1976). H was significant and negative, however, in the regressions for the level of imports of Germany. Although Japan also had a significantly negative human capital coefficient for the level of imports in 1974–76, for the changes in the imports from 1969–71 to 1944–76 and for the whole period, its coefficient was positive and highly significant for export levels, net exports changes in exports, and RCA2. This indicates that Japan's exports have tended to be human capital intensive for the entire period from 1964 to 1976, while its imports since 1969 appear to have become less human capital intensive.

The coefficients on the labor variable (L) are significant and consistent for the regressions for all three countries. Surpsiringly for the U.S., labor is positively related to both the level and changes in the level of exports, to net exports, and to a lesser degree to RCA2 since 1969–71. Both in 64–66 and 69–71 it also appears as negatively related to imports. On the other hand, Japan's

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[18] This measure was used recently by Weiss and Wolter (1976) in their comparison of the machinery trade of Germany, Sweden and the United States.

[19] Balassa was among the first to use this measure. His recent article (1971) updates his earlier results. Lowinger (1975, 1977) also uses the relative change in this variable over time.

Because we are only interested in the significance of the industry characteristics and not the size of the coefficients, this measure is equivalent to using export market shares as the dependent variable. For this reason export market shares or the ratio of exports to imports in a category (as in RCAI) are not used separately as dependent variables.

exports are negatively related to labor content while imports are positively related over the entire period. This result holds for both levels and changes, and for net exports. With the revealed comparative advantage measures, RCA1 and RCA2, the labor variable has become increasingly significant for Japan since the beginning of the period. The German case reveals that labor is positively related to both exports and imports and to changes in their levels, although the coefficient on the change in export levels was present only for the 64–66 to 69–71 period. These results for Germany may be explained by the growing similiarity of German manufacturers exports and imports since 1964 as European integration has proceeded.[20]

The change in the labor coefficents for Japan, on the other hand, may reflect a greater mobility of labor in Japan because the change was quite dramatic. It could reflect a more flexible public and industrial policy which facilitates the movement of labor from lower to higher productivity industries.

The U.S. results are an enigma when compared with past empirical analysis. At first it seemed possible that the labor variable was proxying industry size, but its significance in the scale-free RCA2 equation partially undermines that possibility.

In terms of the capital stock coefficients, (KB), the results show that U.S. imports are relatively capital intensive and have been so since the beginning of the estimation period. Net exports, rate of growth of exports, RCA1, RCA2, and their rates of growth all exhibit significant negative coefficients. For RCA1 and RCA2 this result occurs for the first time in the period 1974–76, which suggests that the U.S. comparative disadvantage in capital-intensive products is increasing overtime. Altogether, the results through 1976 indicate that U.S. imports are capital intensive while exports are not.

Japanese exports, on the other hand, exhibit capital intensity over the entire period, with the capital coefficient being positive and highly significant for export levels and changes, net exports, and RCA1. However, the level of Japanese imports for 1974–76 and the change in Japanese imports from 1969–71 to 1974–76 exhibit significant positive coefficients on the capital variable, which may indicate a change occurring in Japanese import patterns.

Both German imports and exports are positively related to the capital variable for levels and changes. For 1974–76, the regressions for RCA1 and for RCA2M yield significant coefficients on the capital variable which are respectively negative and positive. This may be an indication that Germany has begun to import more capital intensive commodities than it is exporting.

Despite the decline in relative R&D expenditures in the United States which was reported above, U.S. exports through 1976 have remained consistently R&D intensive. Regressions on levels, changes, net exports and RCA2 all bear this out. Possible explanations are that the decline in R&D expenditures has not yet begun to affect exports because of the long lags involved or that the decline in R&D expenditure relative to GDP was not large enough on an absolute level to have yet had an impact on export performance.

The coefficients on the R&D variable in the Japanese regressions indicate that Japan has clearly been an importer of R&D intensive manufactures. Some exceptions to this pattern exist in the estimates of the RCA's and the rates of change of RCA's, and the significance of the positive coefficient on R&D in the RCA2M regressions declined from 1964–66 to 1974–76. These may be an indication of the continuing maturation of the Japanese economy from adaptation to innovation. The only other exceptions to this pattern for Japan involve the 1964–66 period and may well be spurious due to the low base from which Japanese exports were growing. There is a possibility, however, that the strong, positive capital-intensive results for Japan could represent embodied technical knowledge or a "newer" capital stock. Unfortunately, investigation of that issue is beyond the scope of this paper.

Finally, the results for Germany consistently reflect an economy characterized by imports which are R&D intensive. Furthermore, there is little or no indication that the situation was changing through 1976.

The rate of product turnover variable yielded mixed results for the United States. Its coefficient was negative for exports, the change in exports, and net

[20] The growing similarity of Germany's exports and imports is revealed by Spearman rank correlation coefficients which increased from .65 in 1964–66 to .78 in 1974–76. U.S. exports and imports also became more similar, the rank correlation increasing from .51 to .63 while Japan's went from .22 to .35. Unlike the U.S. and Germany where the similarity increased over time, Japan's rank correlation fell slightly for .37 to .35 between 1969–71 and 1974–76. See the Appendix for Spearman rank correlations.

exports, but exhibited a positive sign in the regressions on rate of growth of exports and RCA1. The German results were consistent with imports and the change in imports displaying negative coefficients for product turnover over the entire period. The only exception to the pattern was the rate of change of German imports from 1969–71 to 1974–76, which showed a positive coefficient significant at the 10 percent level. The Japanese results are very similar, although the rate of growth of imports changes sign from 1969–71/1964–66 to 1974–76/1969–71 from negative to positive. Since Germany and Japan have been so successful in imitating products and adopting new technologies, we might have expected that their exports would have been positively related to the rate of product turnover but that was not the case. It is also somewhat surprising that the U.S. results were mixed since the product cycle model would predict a consistent positive sign for the United States.

The consumer goods ratio for the U.S. regressions appears consistently with negative coefficients for exports, with a negative coefficient also appearing for the rate of change of imports from 1969–71 to 1974–76 and for RCA2M over the same period. These latter two observations may have been the result of the relative economic downturn in 1974–76, although neither Japan nor Germany had such a result. For the 1964–66 period, the Japanese results show positive correlation of the consumer goods ratio with exports and net exports and negative correlation with imports. By the 1969–71 period, however, the sign of the consumer goods coefficient in the import change and rate of growth equations has become positive and highly significant, while it is negative in the export rate of growth equation. The results for the revealed comparative advantage equations substantiate these findings. The German results are quite similar, although not quite as pronounced, but they do indicate as a strong structural change from importer to exporter of consumer goods manufactures.

Hufbauer's first trade date variable yields no significant coefficient for any of the U.S. regressions. For Japan, indications of a structural change over time are again strong. The first two periods yield positive coefficients for exports, net exports, and change in exports. Although the coefficient in these equations is no longer significant by 1974–76, negative coefficients for the rate of growth of imports and positive coefficients for the ratio of exports to exports plus imports and for RCA2 provide another indication of the maturation of the Japanese economy. The only inconsistency is the negative coefficient in the regression explaining the rate of change of RCA1 between 1964–66 and 1974–76.

The results are very similar for Germany except that there are no inconsistencies as the import regressions all exhibit negative coefficients and export regressions exhibit positive ones. The fact that these results have held since 1964–66 for Germany suggests that Germany has led Japan slightly in the "catching up" process. These results do suggest that Japan and Germany, through successful imitation and adaptation, have been able to become successful exporters of the "newer products", once solely the domain of the United States.

The product differentiation variable provides mixed results in the case of the United States. Imports and change in imports are negative, but some negative coefficients also occur for exports, change in exports, and rate of change of exports prior to 1971. The RCA1 and RCA2 coefficients are positive, but the coefficients on the rates of growth of these variables are negative. These mixed results for the U.S. provide some support for the Linder hypothesis and for the theory of intraindustry trade.

While the results for the United States are inconclusive with respect to the product differentiation variable, the appearance of the positive coefficient in the ratio of exports to exports plus imports regression for Japan is an indication that Japanese exports are becoming relatively more differentiated. With the exception of the rate of growth of imports and RCA2M equations which showed positive coefficients when 1964–66 was used as the base and a few unexplained signs in the rate of change of RCA1, and RCA2, the German results are consistent with an economy which imports non-differentiated manufactures and exports differentiated manufactures.

The final independent variable which measures the scale economies is positively correlated with U.S. net exports. the ratio of exports to the sum of exports plus imports, and RCA1, while negatively related to RCA2M. There appears to have been a dramatic change during the 1970's, however, as the significance of ES drops sharply in the 1974–76 equations. ES enters negatively and strongly significant in the change in exports equation. It appears that the large internal mar-

ket which one supported U.S. exports is not as important as it once was, perhaps because of market expansion overseas. Alternatively it could result from the movement overseas by U.S. multinational corporations which, in part, have been characterized by economies of scale.

While the results for Japan are not as pronounced, imports on a level and change basis are shown to be scale economy intensive. The negative coefficients for the change in the ratio of exports to exports plus imports and for RCA1 and RCA2 may be attributable to the problems in using the 1964–66 base. The scale economies variable is most consistently significant in the German regressions. German manufactures imports both on the level and change basis are negatively correlated with scale economies, while the rate of growth of exports, the ratio of exports to exports plus imports, RCA1 and RCA2 are all positively correlated and very significant.

We turn now to our second test which is done on a bilateral basis. The bilateral results provide an interesting contrast to the unilateral results in that they provide a measure of the trade structure in manufactures relative to other countries. The first set of bilateral regressions compares the United States to Germany and Japan and Japan to Germany on the basis of shares of O.E.C.D. manufactures exports. The second set is for the same countries, but is based on shares in third markets.

August, 1978

TABLE 4

REGRESSIONS CONTAINING BILATERAL COMPARISONS OF UNITED STATES', JAPAN'S, AND GERMANY'S SHARES OF OECD EXPORTS IN MANUFACTURING FOR DIFFERENT TIME PERIODS 1/

INDEPENDENT VARIABLES

Dependent Variable	Period	Constant	H	L	KB	KD	T	CG	FT	PD	ES	R2/F-STAT
	64/66	982.5487 (0.9873)	0.0010 (1.4745)*	0.0117 (0.3826)	-0.0034 (-1.9712)**	0.3718 (0.2863)	-0.0437 (-0.2431)	-13.8675 (-1.3545)*	-0.4999 (-0.9766)	2.0785 (0.2479)	45.7787 (1.4907)*	0.0365 (1.383)
U.S./JAPAN	69/71	853.5175 (1.376)	0.0006 (1.4721)*	0.0011 (0.0554)	-0.0018 (-1.6761)**	0.0558 (0.0690)	-0.0630 (-0.5617)	-0.7344 (-0.1151)	-0.4358 (-1.3659)*	-2.6987 (-0.5164)	83.5289 (4.3638)***	0.1980 (3.496)***
	74/76	894.3336 (1.110)	0.0013 (2.3317)**	0.0467 (1.8880)**	-0.0044 (-3.1167)***	2.5826 (2.4558)***	-0.2404 (-1.6505)*	-8.9365 (-1.0781)	-0.4556 (-1.0993)	-11.4126 (-1.6811)**	66.7831 (2.6858)***	0.3803 (7.206)***
	64/66	-12.2105 (-0.1488)	0.0001 (1.8617)**	0.0023 (0.9197)	-0.0003 (-1.8894)**	0.2003 (1.8711)**	-0.0104 (-0.7004)	-0.5344 (-0.6332)	0.0070 (0.1649)	-0.6557 (-0.9487)	4.0748 (1.6096)*	0.2224 (3.892)***
U.S./GERMANY	69/71	44.4621 (0.4475)	0.0001 (2.0354)**	0.0032 (1.7147)**	-0.0004 (-2.6005)***	0.3779 (2.9145)***	-0.0243 (-1.3555)*	-1.4839 (-1.4519)*	-0.0220 (-0.4314)	-1.4822 (-1.7707)**	5.7599 (1.8787)**	0.3565 (6.601)***
	74/76	23.1683 (0.4376)	0.0001 (1.7765)**	0.0029 (1.8114)**	-0.0002 (-2.6423)***	0.2286 (3.3086)***	-0.0136 (-1.4168)*	-0.7108 (-1.3051)*	-0.0113 (-0.4159)	-0.7410 (-1.6610)*	1.9983 (1.2231)	0.3369 (6.137)***
	64/66	853.1070 (1.784)	0.0002 (0.6728)	-0.0006 (-0.0387)	-0.0009 (-1.1142)	0.1456 (0.2334)	0.0058 (0.0667)	-3.4567 (-0.7028)	-0.4327 (-1.7596)**	-3.7529 (-0.9316)	-17.2900 (-1.1718)	-0.0061 (0.938)
GERMANY/JAPAN	69/71	1,284.4089 (1.518)	0.0003 (0.5749)	-0.0159 (-0.6110)	-0.0008 (-0.5502)	-1.1187 (-1.0133)	-0.0902 (-0.5897)	7.4287 (0.8537)	-0.6581 (-1.5126)*	1.4646 (0.2055)	98.6153 (3.7778)***	0.1485 (2.763)***
	74/76	770.8482 (1.997)	0.0002 (0.7868)	-0.0001 (-0.0109)	-0.0007 (-1.0253)	-0.4877 (-0.9683)	-0.0438 (-0.6280)	5.0864 (1.2811)	-0.3950 (-1.9901)**	1.0859 (0.3340)	45.6280 (3.8312)***	0.1911 (3.388)***

*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

1/Regressions cover 92 three-digit SITC categories in manufacturing. See the text for a description.

TABLE 5

REGRESSIONS CONTAINING BILATERAL COMPARISONS OF UNITED STATES', JAPAN'S, AND GERMANY'S MANUFACTURING EXPORT SHARES IN THIRD MARKETS FOR DIFFERENT TIME PERIODS 1/

August, 1978

Dependent Variable	Period	Constant	H	L	KB	RD	T	CG	FT	PD	KR	R2/F-STAT
					INDEPENDENT VARIABLES							
	64/66	2,878.4662	0.0018	0.0143	-0.0055	0.1730	-0.1613	-18.7366	-1.4744	9.4837	96.3341	0.0526
		(1.637)	(1.4821)*	(0.2652)	(-1.8171)**	(0.0754)	(-0.5076)	(-1.0360)	(-1.6308)*	(0.6403)	(1.7757)**	(1.561)
U.S./JAPAN	69/71	1,345.1552	0.0009	0.0073	-0.0028	0.1778	-0.0992	-4.3627	-0.6881	-1.3670	101.2337	0.2046
		(1.886)	(1.6928)**	(0.2998)	(-2.0240)**	(0.1707)	(-0.6881)	(-0.5292)	(-1.6770)**	(-0.2004)	(4.1121)***	(3.601)***
	74/76	3,374.7919	0.0065	0.2520	-0.0223	14.3943	-1.2114	-58.7611	-1.7149	-67.0605	302.9601	0.3879
		(0.8178)	(2.2957)**	(1.9906)**	(-3.1220)***	(2.6728)***	(-1.6243)*	(-1.3843)*	(-0.8080)	(-1.9289)**	(2.3793)***	(7.409)***
	64/66	-4.9199	0.0001	0.0028	-0.0003	0.2204	-0.0106	-0.6666	0.0033	-0.7750	4.6941	0.2410
		(-0.05507)	(1.9546)**	(1.0252)	(-2.0436)**	(1.8898)**	(-0.6574)	(-0.7251)	(0.0708)	(-1.0296)	(1.7026)**	(4.210)***
U.S./GERMANY	69/71	46.0803	0.0001	0.0056	-0.0005	0.3842	-0.0254	-1.5231	-0.0229	-1.5250	6.2380	0.3677
		(0.4565)	(2.0580)**	(1.7947)**	(-2.6665)***	(2.9162)***	(-1.3930)*	(-1.4669)*	(-0.4405)	(-1.7933)**	(2.0027)**	(6.879)***
	74/76	28.2895	0.0001	0.0032	-0.0003	0.2408	-0.0145	-0.8086	-0.0139	-0.8059	2.5077	0.3517
		(0.5049)	(1.8266)**	(1.8901)**	(-2.7209)***	(3.2932)***	(-1.4285)*	(-1.4028)*	(-0.4818)	(-1.7072)**	(1.4504)*	(6.484)***
	64/66	240.6001	0.0007	0.0252	-0.0023	1.4915	-0.1118	-6.3271	-0.1207	-7.2250	30.3226	0.3596
		(0.5325)	(2.2098)**	(1.8194)**	(-2.8782)***	(2.5294)***	(-1.3692)*	(-1.3603)*	(-0.5193)	(-1.8981)**	(2.1750)**	(6.677)***
U.S./GERMANY (Excluding E.E.C.)	69/71	242.2429	0.0006	0.0241	-0.0020	1.4319	-0.1109	-6.2213	-0.1218	-6.7481	26.6209	0.3809
		(0.6143)	(2.1538)**	(1.9899)**	(-2.9330)***	(2.7822)***	(-1.5560)*	(-1.5337)*	(-0.6006)	(-2.0311)**	(2.1877)**	(7.221)***
	74/76	263.0608	0.0005	0.0219	-0.0018	1.3133	-0.0973	-5.3200	-0.1329	-5.9178	23.5530	0.3861
		(0.7551)	(2.1516)**	(2.0502)**	(-3.0169)***	(2.8883)***	(-1.5449)*	(-1.4984)*	(-0.7419)	(-2.0161)**	(2.1909)**	(7.360)***
	64/66	-35.7855	0.0000	-0.0003	0.0000	-0.0369	-0.0071	0.7716	0.0188	-0.1497	-1.5697	0.0729
		(-1.386)	(0.5362)	(-0.4239)	(-0.0508)	(-1.0950)	(-1.5160)*	(2.9043)***	(1.4126)*	(-0.6878)	(-1.9695)**	(1.795)
JAPAN/GERMANY	69/71	-39.7164	0.0000	-0.0015	0.0000	-0.0289	-0.0032	0.5153	0.0207	0.0392	-0.9184	0.0042
		(-1.598)	(1.7129)**	(-1.9648)**	(0.0853)	(-0.8898)	(-0.7200)	(2.0939)**	(1.6223)*	(0.1870)	(-1.1976)	(1.043)
	74/76	-28.4276	0.0000	-0.0020	0.0000	-0.0174	0.0018	-0.0074	0.0149	0.1957	-0.7301	0.0176
		(-1.123)	(1.5440)*	(-2.6015)***	(0.6417)	(-0.5264)	(0.4022)	(-0.0282)	(1.1444)	(0.9176)	(-0.9344)	(1.181)
	64/66	-33.7198	0.0000	-0.0001	0.0000	-0.0557	-0.0133	1.7201	0.0180	-0.4392	-2.6912	0.0595
		(-0.6893)	(0.0750)	(-0.0967)	(0.4694)	(-0.8723)	(-1.5078)*	(2.6232)***	(0.7173)	(-1.0656)	(-1.7828)**	(1.640)
JAPAN/GERMANY (Excluding E.E.C.)	69/71	-50.3654	0.0000	-0.0019	0.0000	-0.0450	-0.0072	0.9813	0.0266	-0.1159	-1.7728	-0.0283
		(-1.052)	(1.1591)	(-1.2607)	(0.2771)	(-0.7203)	(-0.8285)	(1.8297)**	(1.0797)	(-0.2874)	(-1.1997)	(0.722)
	74/76	-36.5645	0.0000	-0.0033	0.0001	-0.0220	0.0025	-0.0107	0.0194	0.1630	-1.1695	-0.0041
		(-0.8172)	(1.1309)	(-2.3930)***	(1.1172)	(-0.3774)	(0.3100)	(-0.0231)	(0.8420)	(0.4323)	(-0.8470)	(0.958)

*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

1/Regressions cover 92 three-digit SITC categories in manufacturing. See the text for a description.

The results of these comparisons are given in Tables 4 and 5. Note first of all in the U.S. comparisons that the human capital variable is significant in all regressions although no significance was found in any of the unilateral tests. With respect to Japan, U.S. exports are more human capital intensive, less physical capital intensive, and more characterized by economies of scale, for all three periods. Note that the fit of the equation increases over time and that by 1974–76 U.S. exports relative to Japanese exports are also characterized by greater labor and R&D intensity and by less turnover and product differentiation. There is also a large drop in the significance of the scale economies variable in 1974–76. The negative relationship between scale economies and U.S. export growth between 1969–71 and 1974–76 could account for this result. The results for exports to third markets are remarkably similar.

Examining the three regressions for the United States/Japan markets suggests some subtle changes in the relative export composition from 1964 to 1976. U.S. manufactures exports relative to those of the Japanese have become consistently more labor and R&D intensive, while becoming marginally more human capital intensive. The scale economies variable first rises in significance from 1964–66 to 1969–71 and then falls in 1974–76 (although it remains significant at the 1 percent level). Japanese exports relative to U.S. exports, on the other hand, increase in terms of physical capital, turnover, product differentiation, and consumer goods which becomes significant for the first time in 1974–76. At the same time, the first trade date variable ceased to be significant.

The U.S./Germany comparison yields the same results as the comparison with Japan on the OECD share basis, with the exception of the economy of scale variable which is not significant and the consumption goods ratio which is negative and significant by 1974–76. In the same comparison based on third markets, the scale economy becomes significant in characterizing relative U.S. export shares. The results are the same when the EEC is netted out. Thus German exports relative to U.S. exports are characterized by their capital intensity, turnover, consumer-good nature and product differentiation. U.S. exports, on the other hand, are human capital intensive, R&D intensive, somewhat labor intensive and characterized by economies of scale. That the scale economies variable is not always significant may be the result of the lack of U.S. export growth in industries possessing economies of scale.

The Germany/Japan comparison based on O.E.C.D. shares reveals only two significant coefficients. German exports relative to Japanese exports are characterized by scale economies and are negatively correlated with the first trade date variable. When the same comparison is made to third markets, only the human capital and labor variables are significant with German exports being more labor intensive and less human capital intensive. When the E.E.C. is excluded, only the labor variable is significant with German exports being more labor intensive. However an F test for the whole equation reveals that none of these equations is significant at the 10 percent level.

In sum, the bilateral results largely confirm the results from the unilateral analysis. U.S. comparative advantage is related to R&D intensity, labor intensity and scale economies, although this appears to be decreasing. Relative to Germany and Japan, U.S. exports were also human capital intensive. On the other hand, German and Japanese exports are characterized by their capital intensity, product turnover, consumer goods and differentiated products.

The results for Germany were true throughout the whole period but have just recently become significant for Japan. This reflects, in part, the greater changes that have occurred in Japan's pattern of trade in the past 14 years and that she was slightly behind Germany in the catching up process. Now, however, their trading patterns are quite similar. This is demonstrated by the inability of the independent variables to explain the bilateral comparison of Japanese and German exports. All of these results hold on a world level and in third market areas.

III. CONCLUSION

This paper has used the most recent disaggregated international trade data currently available (through 1976) to test for structural changes in the pattern of trade in manufactures. While this analysis did not provide conclusive evidence, the results obtained are consistent with the hypothesis that the United States has been suffering from a secular decline in its comparative advantage in manufacturing. Both the constant-market-share analysis and the econometric analysis of disaggregated trade in manufacturing were consistent with that hypothesis.

The constant-market-share analysis showed that although the depreciation has arrested the slide of U.S. export shares in manufacturing products, there is no evidence that the trend has been reversed. The results suggested that structural factors such as productivity and investment growth were, in part, responsible for recent changes in the pattern of manufacturing exports.

The econometric analysis of disaggregated trade patterns showed how U.S. exports relative to Germany and Japan were characterized by their R&D intensity, human capital intensity, labor intensity and by economies of scale. German and Japanese exports, on the other hand, were characterized by their capital intensity, consumer goods orientation, product differentiation, and "newness" of the product.

Substantial changes occurred over the period from 1964–76, particularly with respect to Japan. Between 1964 and 1976, Japan increased the capital intensity of its exports and obtained a relative advantage in differentiated products. Meanwhile the U.S. relative advantage increased in labor intensive industries and it decreased somewhat in industries characterized by economies of scale.

Although these results are consistent with the hypothesis that there has been a systematic structural change in U.S. comparative advantage in manufacturing, we could not identify those factors which caused the observed changes in trade patterns. In the United States, decreased R&D effort, lower productivity growth, smaller investment outlays and technology transfer were all possibilities. On the other hand, it could be argued that the depreciation of the dollar has not yet had its full effect. That is unlikely, however, given the 18 percent depreciation on an effective exchange rate basis between 1971 and 1976 and the fact that international markets are highly integrated.

If these long-run, structural factors were responsible for the deterioration in the U.S. trade position, then it is likely that the U.S. trade performance in manufacturing will continue to lag. The causes of the purported secular decline are still present. R&D expenditures by U.S. industry have declined. U.S. productivity increases and the rate of growth of investment are below those overseas. The depreciation of the dollar has not significantly altered the volume or pattern of U.S. foreign direct investment.[21]

The smaller investment growth and declining R&D expenditures are important over the longer run because comparative advantage does not remain constant. Over time larger capital expenditures overseas in newer facilities will enhance the competitiveness of foreign firms. Increased R&D will enable them to develop newer products and processes with which U.S. firms will have to compete. Although depreciation of the dollar will make U.S. products look more attractive in world markets, not doing enough to lower costs and develop newer, higher quality products will sustain the decline. As a result, U.S. comparative advantage may shift from manufacturing.

If such a shift is undesirable, then policy measures may need to be designed now to prevent the secular changes whose full effects may not be felt for a number of years.

Above all else, these results suggest a need for further research in the area. The estimates could be improved by updating the independent variables, including more countries and distinguishing trade by trading partner. The causes of observed changes in the pattern of trade, including productivity and investment in addition to price variables, need to be more systematically investigated. Finally, the robustness of the results could be tested by examining the pattern of trade in a pooled cross-sectional time-series format so that both temporal and cross-sectional differences could be tested.

Although more sophisticated statistical analysis is required to substantiate these findings, they do suggest that more attention should be paid to the structural factors that influence comparative advantage in the long-run.

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[21] In an econometric analysis, Aho (1978) has shown that there was little change in U.S. foreign direct investment behavior after the devaluations. U.S. investment overseas in manufacturing plant and equipment is now 25–30% of the same investment in the United States. This is well above its value in the latter 1960s and early 1970s when the ratio never rose above 20%.

APPENDIX

Variables and Their Sources

Symbol

X = exports taken from OECD trade series C

M = imports taken from OECD trade series C

The two major sources of the independent variables were Hufbauer (1970) and Branson and Monoyias (1977). The basic source for the data on employment, wages, capital expenditures and the volume of shipments was the U.S. Census of Manufacturers and the Annual Survey of Manufactures. The conversion from SIC to SITC was done using the concordance developed by Hufbauer (pp. 208-210).

L = labor measured as total employment in thousands of men. For the year 1967, taken from Branson and Monoyias (1977)

H = human capital calculated by subtracting from the average for the i^{th} group the median wage for males with eight years of education in 1967. The median wage was taken to represent the return to unimproved labor and anything in excess of that, a return to human capital. A capitalization rate of 10 percent was used to arrive at a figure for the stock of

human capital in group i according to the formula.

$$H_i = \frac{W_i - (2.990 \times L_i)}{.10}$$

where w_i is total payroll in industry i in millions of dollars and 2.990 is the median wage in 1967. The variable is taken from Branson and Monoyias (1977). See their appendix for a discussion of the variable.

K-B = capital stock is defined as gross book value as reported annually in the Annual Survey of Manufactures adjusted by Branson and Monoyias (1977) to include inventories of supplies and materials and rental payments acquired during the year capitalized at a rate of 10%. It was for 1967. Their appendix discusses the differences between their measure and Hufbauer's but reports that the two were highly correlated (.91)

RD = research and development is defined as the ratio of R&D funds by product field to shipments by product class, as reported by Kelly (1977). The basic data come from the NSF's "Applied R&D by Product Field." The figures were an average of the years 1968 to 1970. In thosecategories where the concordance between SIC and SITC was not perfect, RD was calculated as

a weighted average of the separate four-digit SITC exports in 1970. Kelly provided a concordance in Table A2.

S = shipments for 1967 to represent industry size were taken from Branson and Monoyias

T = rate of product turnover constructed by Finger (1975) gives the ratio of the number of items in each three-digit category which appeared or disappeared over the period from 1965 to 1971 to the total number of items in the category in 1965. For those categories which were combined in Finger's analysis, the ratio was divided proportionately according to the number of four-digit categories within each three-digit category.

FT = first trade date as derived by Hufbauer except that the actual year which emerged from his averaging technique is used. Hufbauer subtracted the average from 1965.

CG = consumer goods ratio as derived by Hufbauer represents the percentage of commodity output and imports purchased by final consumers directly and those purchased on the second round after one pass through the input-output table. The U.S. data were based upon the 1958 input-output table.

PD = product differentiation is measured as the coefficient of variation in unit values of 1965 United States exports destined to different countries. Differentiated goods are marked by higher coefficients of variation. It is taken from Hufbauer.

ES = economies of scale were equated with the exponent in the regression equation $V=kn^a$, where v is the 1963 ratio between value added in plants employing v persons and average value added for the four-digit U.S. Census Bureau industry, and k is a constant. It is also taken from Hufbauer. See Hufbauer p. 221-223 for more detail on how this and the other variables were created.

DEPENDENT VARIABLE DESCRIPTION

US - United States
JP - Japan
GER - Germany
X - Export Value - Thousands of $ U.S.
M - Import Value - Thousands of $ U.S.
AVG - Mean Value for the specified interval in thousands $ U.S.
XMRAT - SUM(XAVG)/SUM(MAVG) - Ratio of total value of manufactures exports to total value of manufactures imports for the specified interval. The period indicator for the ratio variable is the first year of the interval.
XSHARE - SUM(XAVG)/SUM(OECDXAVG) - Ratio of total value of manufactures exports for a given country to the sum of the same categories for the O.E.C.D. for a specified interval. The period indicator for the share variable is the first year of the interval.
MSHARE - SUM(MAVG)/SUM(OECDMAVG)
XXM - XAVG/(XAVG + MAVG)
RCA1 - (XAVG/MAVG)/XSHARE
RCA2 - (XAVG/OECDXAVG)/XMRAT
RCA2M - (MAVG/OECDMAVG)/MSHARE

EXAMPLE 1: JPMAVG6466 - Average value of Japanese imports for the period 1964 to 1966 inclusive.

EXAMPLE 2: JPRCA269 - Japanese revealed comparative advantage (2) for the period 1969 to 1971.
=(JPXAVG6971/OECDXAVG6971)/JPXSHARE69

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APPENDIX TABLE 1
UNITED STATES

August, 1978

Dependent Variable	Independent Variables									$\bar{R}2$	F-STAT
	H	L	KB	RD	T	CG	FT	PD	KS		
USXAVG6466		+***		+***	-**					0.47	10.05
USXAVG6971		+***		+***	-**	-*		-*		0.55	13.27
USXAVG7476		+***		+***	-*	-*				0.51	11.32
USMAVG6466			+***		-*			-**	-**	0.38	7.24
USMAVG6971			+***					-**		0.27	4.74
USMAVG7476			+***					-*		0.27	4.82
(USXAVG6466-USMAVG6466)		+***	-**	+**		-**			+*	0.39	7.56
(USXAVG6971-USMAVG6971)		+***	-***	+***		-**			+**	0.28	4.96
(USXAVG7476-USMAVG7476)		+***	-***	+***	-*	-***			+**	0.33	5.95
USXAVG6971-USXAVG6466		+***		+***	-**	-**		-**		0.57	14.38
USXAVG7476-USXAVG6971		+***		+***	-*	-*				0.47	9.86
USXAVG7476-USXAVG6466		+***		+***	-*	-**				0.51	11.43
USMAVG6971-USMAVG6466			+**					-*		0.21	3.66
USMAVG7476-USMAVG6971			+***					-*		0.27	4.76
USMAVG7476-USMAVG6466			+**					-*		0.25	4.33
USXAVG6971/USXAVG6466				+***		-**		-*	-**	0.09	2.01
USXAVG7476/USXAVG6971			-*		+*					0.04	1.47
USXAVG7476/USXAVG6466				+**	+*	-**			-*	0.05	1.54
USMAVG6971/USMAVG6466		+*								0.07	1.73
USMAVG7476/USMAVG6971						-*				-0.05	0.49
USMAVG7476/USMAVG6466					+*					0.02	1.23
USXAVG6466/(USXAVG6466+USMAVG6466)								+***	+***	0.21	3.62
USXAVG6971/(USXAVG6971+USMAVG6971)						-**		+***	+***	0.17	3.12
USXAVG7476/(USXAVG7476+USMAVG7476)								+***	+***	0.15	2.76
(USXAVG6466/USMAVG6466)/USXMRAT64					+*	-**		+**	+**	0.09	2.05
(USXAVG6971/USMAVG6971)/USXMRAT69						-**		+*	+**	0.09	1.99
(USXAVG7476/USMAVG7476)/USXMRAT74			-**			-**		+**	+***	0.21	3.61

APPENDIX TABLE 1(cntd)
UNITED STATES

August, 1978

Dependent Variable	Independent Variables									$\bar{R}2$	F-STAT
	H	L	XB	RD	T	CG	FT	PD	ES		
(USXAVG6466/OECDXAVG6466)/USXSHARE64			+*				+**	+*	0.23	4.10	
(USXAVG6971/OECDXAVG6971)/USXSHARE69	+*		+***		-**				0.30	5.37	
(USXAVG7476/OECDXAVG7476)/USXSHARE74	+**	-**	+***		-**				0.35	6.56	
(USMAVG6466/OECDMAVG6466)/USMSHARE64	-*							-**	0.00	0.96	
(USMAVG6971/OECDMAVG6971)/USMSHARE69	-*							-*	-0.03	0.74	
(USMAVG7476/OECDMAVG7476)/USMSHARE74								-**	-0.01	0.88	
USXXM69/USXXM64					-**				0.00	0.97	
USXXM74/USXXM69							-*		-0.01	0.93	
USXXM74/USXXM64									-0.06	0.47	
USRCA169/USRCA164					-*		-*		-0.01	0.93	
USRCA174/USRCA169		-*							-0.01	0.88	
USRCA174/USRCA164							-*		-0.06	0.39	
USRCA269/USRCA264			+*		-***		-**	-*	0.07	1.80	
USRCA274/USRCA269		-**	+*		+**		-*	-***	0.16	2.88	
USRCA274/USRCA264		-*	+*				-**	-**	0.02	1.21	
USRCA2M69/USRCA2M64									-0.02	0.84	
USRCA2M74/USRCA2M69					-***				0.01	1.10	
USRCA2M74/USRCA2M64					-***				0.04	1.42	

August, 1978

APPENDIX TABLE 2
JAPAN

Dependent Variable	Independent Variables									$\bar{R}2$	F-STAT
	H	L	KR	RD	T	CG	FT	PD	ES		
JPXAVG6466	+*	-**	+**			+**	+**			0.17	3.11
JPXAVG6971	+***	-***	+***				+**			0.28	5.02
JPXAVG7476	+**	-**	+**							0.23	4.04
JPMAVG6466		+**		+***	-**	-**				0.17	3.07
JPMAVG6971		+***		+***	-**				-*	0.22	3.93
JPMAVG7476	-**	+***	+**	+***	-***			-**	-***	0.32	5.76
(JPXAVG6466-JPMAVG6466)	+**	-**	+**	-*		+**	+**			0.14	2.68
(JPXAVG6971-JPMAVG6971)	+***	-***	+***			+*	+**			0.24	4.19
(JPXAVG7476-JPMAVG7476)	+***	-**	+**							0.21	3.61
JPXAVG6971-JPXAVG6466	+***	-***	+***				+*			0.32	5.66
JPXAVG7476-JPXAVG6971	+**	-*	+**							0.21	3.62
JPXAVG7476-JPXAVG6466	+**	-**	+**							0.23	4.05
JPMAVG6971-JPMAVG6466		+***		+***	-***				-*	0.22	3.77
JPMAVG7476-JPMAVG6971	-**	+**	+***	+***	-***	+***		-**	-***	0.31	5.64
JPMAVG7476-JPMAVG6466	-**	+***	+**	+***	-***	+**		-**	-***	0.33	5.93
JPXAVG6971/JPXAVG6466				+**		-**			-**	0.06	1.61
JPXAVG7476/JPXAVG6971						-***	-*			0.11	2.21
JPXAVG7476/JPXAVG6466						-**			-***	0.10	2.13
JPMAVG6971/JPMAVG6466		+*			-**	+***		-*		0.08	1.90
JPMAVG7476/JPMAVG6971				-*	+*	+**	-**			0.12	2.42
JPMAVG7476/JPMAVG6466						+***	-**		-*	0.13	2.55
JPXAVG6466/(JPXAVG6466+JPMAVG6466)				-***						-0.01	0.94
JPXAVG6971/(JPXAVG6971+JPMAVG6971)				-**			+*			-0.02	0.78
JPXAVG7476/(JPXAVG7476+JPMAVG7476)						-***	+*	+**		0.13	2.58
(JPXAVG6466/JPMAVG6466)/JPXMRAT64			+***							0.07	1.77
(JPXAVG6971/JPMAVG6971)/JPXMRAT69		-*	+***							0.15	2.74
(JPXAVG7476/JPMAVG7476)/JPXMRAT74		-*	+***						+*	0.18	3.16

APPENDIX TABLE 2(cntd)
JAPAN

August, 1978

Dependent Variable	Independent Variables									$\bar{R}2$	F-STAT
	H	L	KB	RD	T	CG	FT	PD	ES		
(JPXAVG6466/OECDXAVG6466)/JPXSHARE64				-*		+**	+*			0.00	0.95
(JPXAVG6971/OECDXAVG6971)/JPXSHARE69	+*	-**				+*	+**			0.00	1.04
(JPXAVG7476/OECDXAVG7476)/JPXSHARE74	+*	-***					+*			0.05	1.56
(JPMAVG6466/OECDMAVG6466)/JPMSHARE64				+***		-*				-0.01	0.90
(JPMAVG6971/OECDMAVG6971)/JPMSHARE69				+***						-0.01	0.91
(JPMAVG7476/OECDMAVG7476)/JPMSHARE74				+**		+**		-**	-**	0.07	1.80
JPXXM69/JPXXM64				+**		-**		-***	-***	0.13	2.48
JPXXM74/JPXXM69						-***				0.04	1.38
JPXXM74/JPXXM64				+*		-***		-**	-***	0.14	2.65
JPRCA169/JPRCA164						-***				0.04	1.39
JPRCA174/JPRCA169						-***				0.06	1.66
JPRCA174/JPRCA164				+*		-***	-*	-*	-**	0.09	2.05
JPRCA269/JPRCA264				+**		-*			-**	0.04	1.38
JPRCA274/JPRCA269						-***				0.05	1.51
JPRCA274/JPRCA264				+*		-*		-*	-***	0.11	2.27
JPRCA2M69/JPRCA2M64		+*			-**	+***		-**		0.10	2.06
JPRCA2M74/JPRCA2M69				-*			-**			0.06	1.66
JPRCA2M74/JPRCA2M64					-*	+***				0.13	2.51

August, 1978

APPENDIX TABLE 3
GERMANY

Dependent Variable	Independent Variables: R	L	KB	RD	T	CC	FT	PD	ES	$\bar{R}2$	F-STAT
GERXAVG6466		+*	+*							0.26	4.57
GERXAVG6971		+*	+**							0.26	4.63
GERXAVG7476			+**							0.28	4.97
GERMAVG6466	-**	+*	+***	+***	-**			-***	-***	0.37	6.99
GERMAVG6971	-*	+**	+***	+***	-**			-***	-***	0.40	7.74
GERMAVG7476	-*	+*	+***	+***	-**	+**		-**	-***	0.44	8.88
(GERXAVG6466-GERMAVG6466)										0.18	3.25
(GERXAVG6971-GERMAVG6971)										0.18	3.15
(GERXAVG7476-GERMAVG7476)						-*				0.20	3.46
GERXAVG6971-GERXAVG6466		+*	+**							0.26	4.62
GERXAVG7476-GERXAVG6971			+**							0.29	5.11
GERXAVG7476-GERXAVG6466			+**							0.29	5.04
GERMAVG6971-GERMAVG6466		+**	+***	+***	-*			-**	-**	0.37	6.92
GERMAVG7476-GERMAVG6971		+*	+***	+***	-**	+***		-**	-***	0.42	8.32
GERMAVG7476-GERMAVG6466		+*	+***	+***	-**	+**		-**	-***	0.42	8.33
GERXAVG6971/GERXAVG6466										-0.02	0.82
GERXAVG7476/GERXAVG6971						-***	+*		+***	0.16	2.86
GERXAVG7476/GERXAVG6466					+**		+*		+*	0.04	1.40
GERMAVG6971/GERMAVG6466								+***		0.05	1.56
GERMAVG7476/GERMAVG6971					+*	+**	-**			0.08	1.93
GERMAVG7476/GERMAVG6466						+**	-***	+*		0.10	2.12
GERXAVG6466/(GERXAVG6466+GERMAVG6466)						-**		+***	+***	0.18	3.15
GERXAVG6971/(GERXAVG6971+GERMAVG6971)						-**	+*	+***	+***	0.19	3.44
GERXAVG7476/(GERXAVG7476+GERMAVG7476)				-**		-***	+***	+***	+***	0.31	5.63
(GERXAVG6466/GERMAVG6466)/GERXMRAT64			-*			-**		+*	+**	0.05	1.49
(GERXAVG6971/GERMAVG6971)/GERXMRAT69			-**	-*		-***		+***	+***	0.13	2.45
(GERXAVG7476/GERMAVG7476)/GERXMRAT74			-**	-**		-***		+**	+**	0.11	2.24

APPENDIX TABLE 3(cntd)
GERMANY

August, 1978

Dependent Variable	Independent Variables									$\bar{R}2$	F-STAT
	H	L	KB	RD	T	CG	FT	PD	ES		
(GERXAVG6466/OECDXAVG6466)/GERXSHARE64						-**		+**	+**	0.03	1.28
(GERXAVG6971/OECDXAVG6971)/GERXSHARE69				-*		-**		+***	+***	0.07	1.76
(GERXAVG7476/OECDXAVG7476)/GERXSHARE74				-**		-**	+*	+**	+***	0.12	2.41
(GERMAVG6466/OECDMAVG6466)/GERMSHARE64						+**	-*	-***	-*	0.15	2.85
(GERMAVG6971/OECDMAVG6971)/GERMSHARE69						+**	-**	-*	-*	0.14	2.63
(GERMAVG7476/OECDMAVG7476)/GERMSHARE74			+*			+***	-***			0.18	3.26
GERXXM69/GERXXM64							+***			0.00	0.99
GERXXM74/GERXXM69						-***	+**	-*		0.14	2.63
GERXXM74/GERXXM64							+**	-*		0.05	1.50
GERRCA169/GERRCA164							+**	-**		0.01	1.10
GERRCA174/GERRCA169				-**		-***	+*			0.14	2.67
GERRCA174/GERRCA164							+**			0.03	1.28
GERRCA269/GERRCA264				-**		+**	+***			0.07	1.74
GERRCA274/GERRCA269					-*		+**	-**		0.07	1.76
GERRCA274/GERRCA264							+***			0.04	1.43
GERRCA2M69/GERRCA2M64								+***		0.04	1.37
GERRCA2M74/GERRCA2M69				+*		+*	-*		+*	0.07	2.01
GERRCA2M74/GERRCA2M64							-**	+*		0.03	1.35

CORRELATION MATRIX

DATED ANNUAL(1901 TO 1992)

	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0) H	1.000								
1) L	0.834	1.000							
2) KB	0.780	0.741	1.000						
3) RD	0.379	0.177	0.130	1.000					
4) T	0.071	0.148	0.102	0.188	1.000				
5) CG	-0.173	-0.033	-0.209	0.014	0.198	1.000			
6) FT	0.320	0.302	0.329	0.233	-0.024	-0.302	1.000		
7) PD	0.202	0.168	0.065	0.416	0.006	-0.054	0.139	1.000	
8) ES	0.187	0.150	0.147	0.238	0.044	0.219	0.007	-0.007	1.000

BILATERAL STRUCTURAL COMPARISONS

SPEARMAN RANK CORRELATIONS

VARIABLES	U.S./JAPAN	U.S./GERMANY	JAPAN/GERMANY
XAVG6466	.54	.82	.70
XAVG6971	.64	.84	.78
XAVG7476	.66	.83	.83
MAVG6466	.55	.73	.60
MAVG6971	.60	.74	.65
MAVG7476	.62	.74	.68
RCA164	-.22	.47	.15
RCA169	-.18	.39	.27
RCA174	.03	.43	.61
RCA264	-.36	.17	.08
RCA269	-.31	.11	.09
RCA274	-.22	-.03	.13
RCA2M64	-.14	-.08	-.20
RCA2M69	-.10	-.21	-.15
RCA2M74	-.07	-.27	.12

INTERTEMPORAL STRUCTURAL COMPARISONS

SPEARMAN RANK CORRELATIONS

VARIABLES	U.S.	GERMANY	JAPAN
XAVG6466,XAVG6971	.96	.98	.94
XAVG6961,XAVG7476	.96	.99	.92
XAVG6466,XAVG7476	.93	.96	.83
MAVG6466,MAVG6971	.95	.96	.92
MAVG6971,MAVG7476	.96	.96	.93
MAVG6466,MAVG7476	.91	.90	.84
XAVG6466,MAVG6466	.51	.65	.22
XAVG6971,MAVG6971	.61	.75	.37
XAVG7476,MAVG7476	.63	.78	.35
RCA164,RCA169	.92	.96	.89
RCA169,RCA174	.93	.92	.80
RCA164,RCA174	.91	.89	.58
RCA264,RCA269	.90	.92	.92
RCA269,RCA274	.89	.93	.81
RCA164,RCA274	.82	.83	.66
RCA2M64,RCA2M69	.91	.88	.83
RCA2M69,RCA2M74	.88	.81	.83
RCA2M64,RCA2M74	.81	.79	.64

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